



# U.S. FOREIGN POLICY FOR THE MIDDLE CLASS: PERSPECTIVES FROM OHIO

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# **SUMMARY**

All U.S. administrations aim to conceive foreign policies that protect and enhance Americans' safety, prosperity, and way of life. However, views now diverge considerably within and across political party lines about whether the U.S. role abroad is adequately advancing the economic well-being of the middle class at home. Today, even as the U.S. economy is growing and unemployment rates are falling, many households still struggle to sustain a middle-class standard of living. Meanwhile, America's top earners accrue an increasing share of the nation's income and wealth, and China and other economic competitors overseas reap increasing benefits from a global economy that U.S. security and leadership help underwrite.

Policymakers need to explore ways to make U.S. foreign policy work better for America's middle class, even if their economic fortunes depend largely on domestic factors and policies. However, before policymakers propose big foreign policy changes, they should first test their assumptions about who the middle class is, what economic problems they face, and how different aspects of U.S. foreign policy can cause or solve them. They need to examine how much issues like trade matter to these households' economic fortunes relative to other foreign and domestic policies.

Policymakers need to explore ways to make U.S. foreign policy work better for America's middle class, even if their economic fortunes depend largely on domestic factors and policies.

They should acknowledge the trade-offs arising from policy changes that benefit some communities at the expense of others. And they should reach beyond the foreign policy establishment to hear from those in the nation's heartland who have critical perspectives to offer, especially state and local officials, economic developers, small business owners, local labor representatives, community leaders, and working families.

With these objectives in mind, the Carnegie Endowment for International Peace launched a series of state-level case studies to determine whether significant changes to U.S. foreign policy are needed to better advance the economic well-being of America's middle class. Ohio was chosen for the inaugural study because of its economic and political diversity and its well-known status as a bellwether state. Carnegie partnered with researchers at OSU to conduct the study and convened a bipartisan task force comprised of former senior policymakers to provide strategic guidance and shape the findings. Interviews were conducted in Cleveland, Columbus, Coshocton, Dayton, Lima, and Marion to solicit views in diverse conditions across the state.

### What We Heard and Learned

U.S. national security and foreign policy professionals in Washington, DC, and worldwide strive to sustain U.S. global leadership. Their international economic, trade, commercial, defense, aid, and other foreign policies aim to promote macroeconomic growth and stability and to deliver maximum aggregate benefits for the nation. But many people at the state and local levels are unclear on what all this activity actually entails or how it helps their communities prosper. They worry that policymakers prioritize the concerns of special interests with privileged access and influence. And they mostly depend on big businesses and industry associations to assess the economic implications of U.S. foreign policy—which becomes problematic when the interests of the state's key industries are at odds with each other or their own workers. Trade-offs assumed to exist between different U.S. states play out within Ohio itself.

Few interviewees feel well-placed to judge how U.S. foreign policy or global leadership, writ large, could work better for Ohio's middle class. Most can only comment on what is visible to them: trade, foreign direct investment (FDI), and defense spending. And in each of these areas, policy changes that could benefit some might hurt others, depending on unique local economic conditions.

# Many Parts of Ohio Are Thriving, but Others Are Still Struggling

- The term "Rust Belt" no longer accurately describes Ohio's economy. The state's government, private sector, and local communities now partner together to attract investment in a highly diversified, modern, globally connected economy. Ohio still enjoys key strategic advantages—including its geographic location, distribution networks, academic and research institutions, and human talent—that originally attracted manufacturers to the state. The economy is growing, unemployment is falling, and business confidence is high.
- At the same time, Ohio's economy and workforce are growing and prospering unevenly. Many of the best-paying middle-class jobs require bachelor's or advanced degrees, putting them beyond reach of the majority of employees. Manufacturing, which can still provide a decent wage for those without a college degree, accounts for less than 13 percent of the workforce. The most prevalent occupations, such as food preparers and retail salespersons, pay average annual wages below \$33,000 per year. Walmart is the top employer in Ohio, as it is in twenty-one other U.S. states. Many smaller cities and towns struggle to reinvent their economic bases following the departure of major employers.

# Trade Has Become a Proxy for Debate on Wider Economic Challenges

- To create more well-paying jobs in Ohio, attract investment, and provide working families with more affordable goods and services, the United States must be trading freely in an open, integrated global economy. That is the opinion expressed by economic developers in all six areas where interviews were conducted. No one is arguing strictly for protectionism or isolationism. But opinions diverge on how best to benefit from trade and globalization, given disparities in how businesses and workers to date have profited and suffered as a result of it.
- In Columbus, state officials, economic developers, and business owners support strict enforcement of trading rules, including on theft of intellectual property. Yet they caution against trade instability that could undermine efforts to attract investment for both the manufacturing and services sectors. They worry about efforts to help certain struggling industries at the expense of others. And they fear that restrictive immigration policies could make it harder to secure top talent from the global market. Essentially, they pride themselves on being a "global city" and believe this international orientation contributes to making Columbus one of the fastest growing cities in America.
- Even in struggling manufacturing towns like Coshocton and Marion, they
  also express strong support for free trade and accept that technological
  advances and other market forces will continue to transform employment in
  their area. However, they insist on "fair trade" and additional measures that
  would give them "a fighting chance." For them, this means pushing for higher
  - labor standards within trade agreements with low-wage paying countries; taking a tougher line against countries not playing by the rules; and not allowing externally owned, large companies to abruptly walk away and leave behind decaying buildings and infrastructure. For some, a "fighting chance" also means repairing a de facto social contract that once seemed to exist among government, business, labor, and communities.
- For constituencies hard-hit by manufacturing job losses, "trade" appears to be a proxy for discussing a broader set of socioeconomic challenges arising from

structural changes in the global economy. According to OSU's research, Ohio suffered an estimated net loss of 750,000 good-paying middle-class manufacturing jobs between 1969 and 2009 due to various factors, including

No one is arguing strictly for protectionism or isolationism. But opinions diverge on how best to benefit from trade and globalization, given disparities in how businesses and workers to date have profited and suffered as a result of it.

automation and competition with other U.S. states. Foreign trade competition also accounted for a sizable portion, though no more than one-third of the total manufacturing jobs lost during this period. Trade adjustment assistance programs (TAA) failed to adequately offset the pain of the traderelated job losses and were never designed to help workers, businesses, and entire communities facing crises due to other factors. Meanwhile, workers' collective bargaining power for higher wages and benefits diminished, as union participation dropped precipitously during this time.

# **Escalating Trade Tensions With China Elicit Mixed Reactions**

- Of the trade-related job losses, import competition from China following its accession to the World Trade Organization (WTO) in 2001 accounted for a far greater share than the North American Free Trade Agreement (NAFTA). Interviewees affected by the "China shock" express sympathy for President Donald Trump's imposition of tariffs on imported Chinese goods. "At least he's doing something" is a sentiment expressed by those describing China's model of state capitalism as incompatible with the international trading system.
- However, many of the economic developers interviewed fear that a prolonged trade war with China could create considerable uncertainty and unpredictability in the marketplace. They worry this would have a chilling effect on Ohio's ability to attract investment and maintain a competitive economy. And agricultural exporters, such as in Lima, urged against thinking in zero-sum terms, because China represents an important market for their products.

# Ohioans Across the Spectrum Highlight the Importance of FDI

- While Ohioans appear divided on trade, interviewees in all areas singularly stress how attracting FDI is central to creating more well-paying middle-class jobs in urban and rural counties across the state. All interviewees appear to agree that state government, business, and local communities should work together to attract more FDI, especially in light of the fierce competition they face from other U.S. states and internationally.
- Once a source of economic anxiety, Japanese investment now accounts for over 70,000 of the approximately 247,000 jobs in Ohio directly supported by FDI (roughly equal to those directly supported by exports). Honda is now the state's top manufacturing employer. Despite objections to Chinese trading practices, virtually all interviewees said they want more Chinese FDI in Ohio. Many are open to the idea that China could one day become a major provider of FDI, similar to Japan, though they recognize the fundamental

differences between these two countries' relations and alignment of interests with the United States.

# Views on Defense Spending Distinguish Between War-Fighting and Job Creation

- Just as FDI is seen as critical for local economic development in many parts
  of Ohio, so too is defense spending, notwithstanding interviewees' ardent
  opposition to what some portrayed as "unwise, costly, and unfunded wars."
- Interviewees across the political spectrum voice strong support for sustaining or increasing defense spending that provides jobs. If the Wright-Patterson Air Force Base—Ohio's largest single-site employer—were to close, the Dayton area would be devastated. Similarly, if tank production for the U.S. Army were substantially reduced or halted, Lima would suffer greatly. Ohioans also count on the National Guard and Reserves to help cover educational expenses, acquire coveted training, earn a livable wage, receive healthcare, and supplement their retirement savings.

# Issues to Consider in Making Foreign Policy Work for the Middle Class

It is too soon to gauge the implications of the renegotiated NAFTA agreement, now called the U.S.-Mexico-Canada Agreement (USMCA). Further, while there will be winners and losers among Ohio's middle class as a result of tariffs or a "trade war" with China, there is too much uncertainty and insufficient data at this point to declare who they are. In any event, that was not the purpose of this study; however, the quantitative and qualitative data gathered helps to place such debates in a wider context. Five major sets of policy directions and questions emerged that should help inform policymakers' efforts to make U.S. foreign policy work better for the middle class:

**Clarify the national economic interests:** How should national economic interests (to be advanced through foreign policy) be defined? To what extent are those interests undercut when the benefits from economic growth concentrate more in upper-income brackets and specific geographic locations—and meanwhile, an increasing number of workers and places struggle to sustain a middle-class standard of living?

**Link trade to a comprehensive national economic strategy:** How can we ensure that the trade agenda is developed in tandem with a comprehensive economic strategy to enhance competitiveness and help workers and communities adapt to structural changes in the global economy?

**Develop a national strategy for FDI:** What more must be done at a national level, through public and private efforts, to make the United States even more competitive in the global market to attract and retain FDI while discouraging a "race to the bottom" between U.S. cities and states to win deals?

**Highlight the economic trade-offs around defense spending:** How can the debates on the defense budget more clearly acknowledge the livelihoods of working families and entire communities it sustains, the health of the global economy it promotes, and the resources for pressing domestic investment it depletes and diverts?

**Define the U.S. global leadership role and its economic implications:** As the need for domestic investments at home increases and the nature of international competition and cooperation evolve, especially with China, what should U.S. global leadership entail, what will it cost, and how will American working families benefit from it economically?

These questions leapt out from the data gathered during this study, especially from the micro-case studies conducted in Columbus, Cleveland, Coshocton, Dayton, Lima, and Marion. The answers, however, are less obvious, as they will require policymakers to contemplate major strategic shifts and to choose among starkly different options (see the report's concluding chapter). Carnegie task force members intend to elaborate on, and add to, these policy options following additional state-level case studies in 2019 and will offer detailed recommendations in a final report in 2020. Meanwhile, the data and dilemmas highlighted in this inaugural study should provide policymakers with food-for-thought—at a time when U.S. foreign policy has reached a critical inflection point.

### CHAPTER 1

# AT THE INTERSECTION OF DOMESTIC AND FOREIGN POLICY

It is widely recognized that foreign and domestic issues are now powerfully joined. But we need to fully understand how they intersect and what that means for the world. Earlier this year, the Geoeconomics and Strategy Program at the Carnegie Endowment for International Peace launched a series of case studies to help policy experts answer this fundamental question:

Are significant changes to U.S. foreign policy required to better advance the economic interests of America's middle class?

Leading up to the U.S. presidential 2020 election, candidates will be seeking direction on how best to address Americans' struggles amid uncertain domestic and global environments. However, before policy experts across the political spectrum share their views, they should first test their long-held assumptions about the economic fortunes of America's middle class and how various U.S. foreign policies may impact them. Local economies across the country look very

different today than they did in past decades, and sticking with traditional approaches, or radically departing from them, might ultimately do more harm than good.

To this end, Carnegie's case studies are designed to capture additional data and different perspectives from U.S. states across the nation's heartland. As this first study shows, the findings could usefully inform the development of more comprehensive strategies. They could also help those who generally see the world through the prism of geopolitics and security but wish to pay more attention to economic developments at home. More broadly, they

may be useful for explaining the domestic determinants of U.S. foreign policy to local officials, business communities, and the general public, as well as to foreign counterparts overseas.

Carnegie has assembled a bipartisan task force of former national security strategists, foreign policy planners, trade negotiators, and international economic experts to provide strategic direction to the studies and shape their main findings. The views of these former senior officials, who served in prior Republican and Democratic administrations, diverge considerably on individual foreign and

Local economies across the country look very different today than they did in past decades, and sticking with traditional approaches, or radically departing from them, might ultimately do more harm than good.

# **Defining Foreign Policy**

Foreign policy serves as shorthand in this report for the spectrum of foreign, defense, development, international economic, trade, and other policies that guide the work of American diplomats, soldiers, trade negotiators, aid experts, and commercial advocates.

# **Defining the Middle Class**

Middle class or middle income in this report refers to households earning an income that is two-thirds to double the U.S. median annual income, adjusted for household size and local cost of living (lower-income households have incomes less than two-thirds of the median; upper-income households have incomes that are more than double the median). According to this widely recognized definition—employed by the nonpartisan, nonadvocacy Pew Research Center—the 2016 income range for the middle class in the United States—and in Ohio for comparison—is as follows:

### Income Range for the Middle Class Is Lower in Ohio Than Nationally

	UNITED STATES			ОНІО		
Household size	2/3x median income	median income	2x median income	2/3x median income	median income	2x median income
1-person	\$26,093	\$39,140	\$78,280	\$23,301	\$34,952	\$69,904
2-person	36,902	55,353	110,705	32,953	49,430	98,859
3-person	45,195	67,793	135,585	40,359	60,539	121,078
4-person	52,187	78,280	156,560	46,603	69,904	139,808

**SOURCE:** Rakesh Kochhar, "The American Middle Class is Stable in Size, but Losing Ground Financially to Upper-Income Families," Pew Research Center, September 6, 2018, http://www.pewresearch.org/fact-tank/2018/09/06/the-american-middle-class-is-stable-in-size-but-losing-ground-financially-to-upper-income-families/.

These ranges vary when adjusted for local cost of living and household size. They are also very broad and hence just a starting point for discussion; those people at the top end of the middle-income bracket likely experience very different realities than those at the bottom. Furthermore, as Pew acknowledges, income is an incomplete gauge. A recent poll reveals that Americans' definition of the middle class is based on many other factors, too, including their ability to hold a secure job, save money, take a vacation, own a home, and earn a college education (in order of importance).

Pew Research Center, "America's Middle Class Is Losing Ground," December 9, 2015, http://www.pewsocialtrends.org/2015/12/09/the-american-middle-class-is-losing-ground/; Pew Research Center, "America's Shrinking Middle Class: A Close Look at Changes in Metropolitan Areas," May 11, 2016, http://www.pewsocialtrends.org/2016/05/11/americas-shrinking-middle-class-a-close-look-at-changes-within-metropolitan-areas/. For a good overview of the many different definitions of the middle class, see Richard Reeves, Katherine Guvot, and Eleanor Krause, "Defining the Middle Class: Cash, Credentials, or Culture?," Brookings Institution, May 7, 2018, https://www.brookings.edu/research/defining-the-middle-class-cash-credentials-or-culture/.

ii Anna Brown, "What Americans Say It Takes to Be Middle Class," Pew Research Center, February 4, 2016, http://www.pewresearch.org/fact-tank/2016/02/04/what-americans-say-it-takes-to-be-middle-class/.

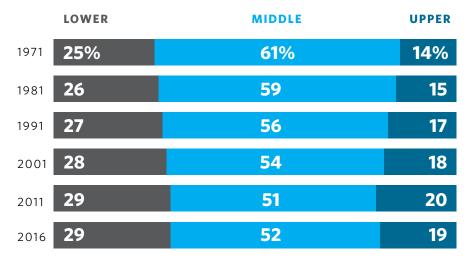
domestic policies. But they share a common desire to take a fresh look at their assumptions about how the U.S. role abroad impacts the fortunes of America's middle class at home. (See Box 1 for how foreign policy and the middle class are defined in this report.)

# **America's Struggling Middle Class**

U.S. diplomats and elected officials have long touted the middle class as the backbone of the country and the shining success story of America's political and economic models. But America's middle class has been steadily hollowing out over the last several decades (see Figure 1).

While the percentage of American households considered to be middle class has stopped shrinking in the last several years, and incomes rose for those in the lower-, middle-, and upper-income households between 2010 and 2016, the decades-long trend continues of those in the upper-income bracket steadily accruing an increasing share of the nation's income and wealth. The median income of three-person households in the lower-income bracket in 2016 (\$25,624) was less than in 2000 (\$26,923); it was about the same for middle-income households in

FIGURE 1
Size of American Middle Class Stabilizing, but Much Ground to Regain



PERCENT OF U.S. ADULTS BY INCOME TIER

**SOURCE:** Rakesh Kochhar, "The American Middle Class Is Stable in Size, but Losing Ground Financially to Upper-Income Families," Pew Research Center, September 6, 2018, http://www.pewresearch.org/fact-tank/2018/09/06/the-american-middle-class-is-stable-in-size-but-losing-ground-financially-to-upper-income-families/.

**NOTE:** Adults are assigned to income tiers based on their size-adjusted household income in the calendar year prior to the survey year for 1971–2011 and the 2015–2016 calendar years for 2016. Figures may not add to 100 percent due to rounding.

2016 and 2000 (\$78,442). Only the median incomes of upper-income households increased from 2000 (\$183,680) to 2016 (\$187,872). In 1983, the upper-income net worth was 3.4 times greater than the median net worth of middle-income families, but by 2016, it was 7.4 times greater.

The distributional trends for middle-class American households may partly explain why people are increasingly arguing that the system is rigged in favor of those at that top. Moreover, it could explain why some working families are amenable to policy changes, including in foreign policy, while those in the top income bracket defend the status quo.

But these distributional trends and perceptions of fairness are only part of the story. The escalating costs for healthcare, childcare, and education, among other major household expenditures, have transformed what it means to be earning a middle income. As families struggle to meet the unavoidable costs for basic necessities, they are forced to reconsider taking a vacation, renovating a home, buying a new car, retiring when planned, or paying down household debt. A middle-class standard of living several decades ago did not entail having to make such trade-offs.

Attaining a comfortable middle-class standard of living today may require being in the upper-middle income bracket, if not the upper-income bracket, depending on the local costs of living. But it is increasingly difficult to climb into those ranks with only a bachelor's degree—and especially so without one.

Working families accordingly maintain sober expectations about their long-term economic future, even as economic growth rates climb, unemployment levels drop, and business and consumer confidence soar in the near term.

Many solutions to the long-term economic challenges confronting America's middle class lie in changes to domestic policies on taxes, education, worker training, healthcare, childcare, pensions, family leave, occupational licensing, housing, infrastructure, transportation, and corporate governance. These issues will remain subjects of debate within and across party lines. President Donald Trump argues that the United States more importantly needs a different foreign policy—an America First foreign policy—to help the middle class. At least with respect to trade policy, he is not alone. A sizable number of Democrats and Republicans

share Trump's view that free trade agreements brokered by past administrations have not served American workers as well as they should have, even as they question his negotiating tactics and oppose many other aspects of his domestic and international agendas.

Thus, we have arrived at an inflection point for U.S. foreign policy. Some core tenets of the U.S. role abroad are being called into question because important political actors, on both sides of the aisle, believe these tenets no longer serve the

Many solutions to the longterm economic challenges confronting America's middle class lie in changes to domestic policies on taxes, education, worker training, healthcare, childcare, pensions, family leave, occupational licensing, housing, infrastructure, transportation, and corporate governance. interests of America's middle class. U.S. foreign policy ambitions of past decades now appear to be in tension with economic realities at home, in stark contrast to their convergence in the aftermath of the Second World War.

# The Evolving Intersection of U.S. Foreign Policy and Economic Considerations<sup>4</sup>

# Post-World War II Convergence of Foreign Policy and Domestic Economic Well-Being

American and European leaders had already begun thinking about establishing a Western-led international order following the Great Depression and the emergence of authoritarian blocs in the interwar years. But the emergence of the Soviet threat in the late 1940s, following the Second World War, provided a clear, strategic rationale for the United States to build up its defenses, extend a security umbrella over European and Pacific allies, and invest in their postwar economic reconstruction. America needed to build up "the West" as a bulwark against the spread of communism and Soviet aggression.

U.S. political leaders relied on an exceptional and unique set of circumstances to sell a reluctant American public on the imperative for assuming major leadership responsibilities abroad. In addition to the Soviet threat that provided a strategic rationale, the effects of the Second World War provided an economic rationale, too. The war effort had helped to power parts of the U.S. economy, while largely destroying the productive capacities of economic competitors in Europe and Japan. Thus, U.S. economic assistance to nations after the war served to create more markets overseas for U.S. products, with little to fear from foreign import competition. It therefore demonstrably advanced U.S. economic prosperity.

In the post-Depression era, workers making up America's expanding postwar middle class enjoyed higher wages—thanks in no small part to the power of collective bargaining they enjoyed through high rates of union participation. Major U.S. industries could afford to pay higher wages because of minimal foreign competition. Moreover, both businesses and workers reaped benefits from higher levels of government spending on education and infrastructure during president Franklin D. Roosevelt's New Deal era of recovery programs.

The broad prosperity and economic security enjoyed by the American middle class in the quarter century following the Second World War laid a strong foundation at home for the United States to exercise global leadership overseas. Such leadership included the United States brokering the world's first truly global trade agreement, the General Agreement on Tariffs and Trade. The United States served as the chief architect and underwriter of international institutions, including the United Nations (UN), the World Bank, and the International Monetary Fund (IMF). These institutions helped give universal legitimacy to principles at

the heart of the U.S.-led Western order. They acted as force multipliers in support of U.S. foreign policy, providing a vehicle for international burden-sharing. The UN's existence also provided a framework for managing great power com-

From the late 1940s to the 1960s, the United States did indeed have a "grand strategy" that married its foreign policy goals with its domestic economic realities. But the strategy began to fray in the 1970s, prefiguring a shift in the 1980s toward the diminished role of the state, financial liberalization, and globalization.

petition, even though Cold War dynamics prevented the Security Council and other UN bodies from realizing their full potential.

From the late 1940s to the 1960s, the United States did indeed have a "grand strategy" that married its foreign policy goals with its domestic economic realities. But the strategy began to fray in the 1970s, prefiguring a shift in the 1980s toward the diminished role of the state, financial liberalization, and globalization. U.S. economic aid and favorable terms of trade granted to Europe and Japan succeeded in accelerating the countries' resurgence. However, it also hastened their arrival by the 1970s in the United States as fierce economic competitors, at precisely the time when the country was facing mounting economic, political, and social strife. As foreign competition rose, the interests of major U.S. manufacturers looking to decrease costs, and those of organized labor seeking to sustain higher wages

and benefits, came to a head. Fissures within the Democratic Party also emerged. The nation made strides to combat racial discrimination as the civil rights movement gained steam. But in the process, many southern Democrats migrated to the Republican Party, dealing a blow to the political coalition on which Roosevelt had relied to build the New Deal.

This was happening as economic growth slowed and unemployment and inflation—"stagflation"—soared. The Vietnam War, in addition to claiming tens of thousands of American lives, divided the nation and added to skyrocketing national debt. Facing severe fiscal challenges, the United States abandoned the Bretton Woods arrangements that fixed exchange rates to the U.S. dollar and constrained global capital flows. And trust in government itself eroded during the Vietnam War and the Watergate political scandal. The United States appeared to be in decline—its relative advantages receding—and, hence, policymakers wavered between détente and confrontational foreign policy.

# Post-Cold War Attempts to Realign U.S. Foreign Policy and Economic Security

The end of the Cold War created a new geopolitical reality in the 1990s. The United States emerged as the lone global superpower in a more peaceful world. Then president George H.W. Bush put forward a vision for a "New World Order" led by the United States. No longer facing an existential threat from overseas, U.S. leaders faced growing domestic demands to prioritize festering economic challenges at home.

Democratic and Republican administrations in the 1990s and 2000s responded to these pressures by trying to build a foreign policy that would promote economic prosperity. They assumed that the transition to an open, integrated global economy, with the full inclusion of economies around the world, including a rising China, would power global economic growth and create new opportunities for U.S. exports and investment. They moved to leverage the advantages of an integrated North American production platform to compete more effectively in the new global economy. And they tried to transition the previous U.S.-led Western order-which had helped bind America's allies and partners together through open trade, shared values, and collective action on common security challenges—into a U.S.-led international order. They sought to get Russia and China on board with such an order, rather than exclude them from it—to ultimately create a shared stake in the global order and broaden the international coalition to help counter transnational threats. As a result, the United States would be able to reduce its spending on defense and great power competition; increase domestic investments in education, infrastructure, other longterm productivity factors, and wage growth; and ultimately balance its budget.

However, the U.S. embarked on this path without repairing the social compact among government, business, labor, and communities that had begun to fray in the 1970s. The pro-growth strategies delivered windfall profits for corporate shareholders and those in the upper-income bracket, while wages for rank-and-file employees stagnated. The new global market created enormous new opportunities for U.S. businesses to sell products and services abroad, but it also thrust American workers into competition with China, Mexico, and other low-wage countries. Many communities lost their main sources of economic activity due to outsourcing and offshoring.

Furthermore, the United States was eventually forced to increase defense spending—first due to wars in Afghanistan and Iraq following the September 11 terrorist attacks and then due to the resurgence of geopolitical competition with China and Russia. The combination of unfunded wars, increased defense spending, escalating costs for entitlement spending in an aging nation, and tax cuts once again led to skyrocketing national debt, adding to the nation's fiscal challenges as it confronted the Great Recession.

# **Prevailing Uncertainty and Contradictions**

Today, there is confusion at home and abroad about the trajectory of U.S. foreign policy. The post–Cold War era appears to have come to an end. Any hopes of revitalizing the more peaceful and prosperous U.S.-led "New World Order" envisaged three decades earlier have given way to deep anxieties about what lies ahead in a more contested strategic environment.

Many across the political spectrum are arguing for reinvigorating the Western alliance to contend with resurgent geopolitical competition with China and Russia. They are also calling for tougher action to combat mercantilist and unfair

Chinese trade practices. But they appear ambivalent, conflicted, or divided over the core tenets of previous U.S. strategies to unite "the West." These core tenets once included leaving no doubt about U.S. security guarantees for allies; actively supporting a Europe that is whole, free, and at peace; strenuously defending democracy and human rights; leading and maintaining a united front in international institutions to advance shared interests and values; and promoting free trade.

The Trump administration's national security strategy documents indicate that these principles continue to guide U.S. foreign policy, albeit with key adjustments expected with the transition from a Democratic to a Republican administration and with the changes in the strategic environment. But the core underlying principles, which have guided U.S. foreign policy over the last several decades, appear to reflect more continuity than change.<sup>5</sup>

Trump's own interpretation of his America First foreign policy, however, entails a more dramatic break from the past. He is not just pushing allies of the North Atlantic Treaty Organization (NATO) to spend more on their own defense, as previous presidents have done, but is also calling into question the fundamental benefits the United States derives from alliances. He is pressing China on unfair trading practices—for which there is broad support across the political spectrum (for the goal, not necessarily the tactics). But he is also imposing tariffs on imported steel and aluminum from allies and has at various moments threatened tariffs on imported automobiles and auto parts on national security grounds. And he continues to propose massive cuts to U.S. foreign aid and contributions to international organizations. These are just some of the major changes to U.S. foreign policy he is pursuing in the name of advancing the economic well-being of American workers and families.

The relationship between U.S. foreign policy and middle-class well-being now commands center stage, at a time when the trajectory of the U.S. role in the world has come to an inflection point. Would a significant change to U.S. foreign policy, whether along the lines of Trump's America First policy or otherwise, address the causes of the economic struggles American families face? Relative to domestic policies, how much does U.S. foreign policy really matter to the economic well-being of the American middle class? How do the domestic and international agendas fit together? These are some of the big questions explored in this study, as part of a larger effort to identify ways to make U.S. foreign policy work better for the American middle class.

# Ohio as a Bellwether State

This report begins to tackle the above questions from the ground up, using Ohio as a compelling first case study. Ohio once represented what journalist Neal Peirce described in the 1970s as "the personification of the Middle Class Society" in America. Today, Ohio's economic and political dynamics represent a microcosm of the country itself. Some of its cities, such as Cincinnati and Columbus,

are prospering as they attract young, educated talent and global investors to a modern, diversified twenty-first-century economy. The state has rural areas thriving with productive farms and agribusiness. And it boasts abundant shale resources and hosts military facilities and units that are critical to the nation's security and the state's economy.

Yet Ohio also has inner cities and rural areas under stress. There are towns struggling to reinvent themselves after the devastation of their twentieth-century manufacturing facilities due to automation and trade. The state confronts resource constraints to upgrade critical infrastructure and upskill its workforce.

Altogether, Ohio's regions and congressional delegation span the political spectrum of conservative Freedom Caucus members, traditional Republicans, moderate Democrats, and social and economic progressives. Since 2010, it has been led by a Republican governor with a national profile whose politics defy neat categorization. And, as is often said, Ohio remains a bellwether state. Every presidential candidate since 1964 who won Ohio captured the White House, including Barack Obama in 2008 and 2012 and Donald Trump in 2016.

To further understand Ohio's increasingly diverse economic interests and challenges, Carnegie partnered with OSU's John Glenn College of Public Affairs. The college has been leading several research efforts on the future of Ohio's economy and its middle class, including through the Toward a New Ohio project and Alliance for the American Dream project. To provide additional core input on Ohio's realities, the school convened researchers associated with those efforts, enlisted the expertise of its leading academic authorities on Ohio's economy, and drew on its statewide networks.

# **Local Perspectives**

There is a rich debate taking place within the Washington, DC-based foreign policy establishment about the future direction of the U.S. role abroad. This study introduces some less familiar voices and viewpoints into the mix. It seeks to expose those in the nation's capital responsible for developing and implementing foreign policies to the diverse perspectives Ohioans express on international issues affecting the middle class. The aim is not to sell Ohio on any particular set of policies devised in Washington. Rather, it is to sell Washington on the need to better understand the aspirations of middle-class families and communities in Ohio, the constraints they face, and the perceptions they hold about how U.S. foreign policy affects their interests.

Recent research undertaken by the team at OSU provided the foundation for this study, particularly three papers published by the John Glenn College as part of its Toward a New Ohio project. William Shkurti, a former budget director in Ohio's state government, and Fran Stewart, an Ohio-based former journalist and current public policy researcher on regional economic development, authored the papers.<sup>7</sup>

To supplement the research, several dozen interviews and focus groups were conducted across Ohio with state officials, heads of economic development associations, entrepreneurs, small business owners, local labor leaders, and local civic organizations. The team at OSU—which included Professor Ned Hill, a leading expert on Ohio's manufacturing industry—drew up the list of interviews. Fran Stewart, who is based in Cleveland but grew up near southern Ohio's Appalachian region, organized and led the interviews and focus groups. Members of Carnegie's Geoeconomics and Strategy Program joined many of them. The interviews took place in six communities representing Ohio's distinct regions: Cleveland, Columbus, Coshocton, Dayton, Lima, and Marion. This allowed the study team to capture perspectives from (1) big cities that drive much of the state's economy, yet are very different from each other; (2) smaller cities that are thriving or struggling to reinvent themselves; and (3) more rural counties with different economic outlooks. The mix of communities also ensured that the interviews spanned areas that voted for Trump and areas that voted for Hillary Clinton in the 2016 presidential election, by both overwhelming and narrow margins (see Figure 2).

Members of Ohio's congressional delegation and their staffs, as well as DC-based national business and trade associations and labor organizations, all possess extremely valuable perspective on the issues in question. Task force members briefed some of these representatives on this effort and benefited from their informal advice. But no Washington-based officials were included among the formal interviews, because priority was given to shedding light on local perspectives.

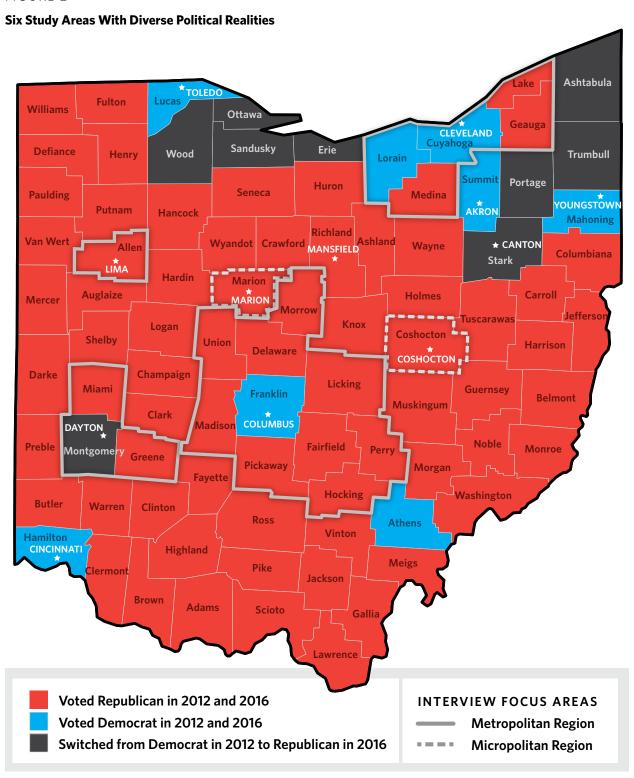
The interviews conducted in Ohio constitute a very important input to this study. They prompted and provoked review of academic literature and government statistics. They provided concrete anecdotes and examples to make general points more specific. And they informed the report's focus and organization. However, the study's findings and conclusions are not based on the interviews alone. The interviews represent a relatively small sample size. And, as diverse as the locations were, different perspectives may have emerged in other locations, such as Akron, Ashtabula, Athens, Cincinnati, Toledo, and Youngstown.

# **Underlying Themes**

Key messages emerging from the interviews fell into three broad categories:

The reading of the past matters. Trump's "Make America Great Again" slogan clearly speaks to many Ohioans' sense of nostalgia and grievance about a time when the state led the nation in delivering good-paying manufacturing jobs that made a middle-class lifestyle accessible to most households (with the notable exception of people of color and other marginalized groups). Many describe the net loss of approximately 750,000 manufacturing jobs between 1969 and 2009 as centrally relevant to the decline of Ohio's middle class.<sup>8</sup> But views diverge

FIGURE 2



considerably over the degree to which trade policy created that outcome relative to other factors, such as automation and domestic competition. In reality, the cause of manufacturing job losses was not an either/or proposition, as some of the national-level debate sometimes implies. The relative weight of different fac-

tors varied across time and place over the past fifty years.

Most interviewees clearly identified themselves as globally oriented, in favor of foreign investment and fair trade on a level playing field and adamantly opposed to seeing the world in zero-sum terms.

To better understand how trade policy and other factors contributed to shaping Ohio's economy, Chapter Two describes the transformation of Ohio's manufacturing sector over the last half century, drawing on state-based and national-level research. This historic grounding helps illustrate why a focus on trade alone does not do justice to the full range of struggles various communities confront in the twenty-first-century economy. It also helps shed some light on why the debates over trade with China, the future of the Trans-Pacific Partnership (TPP), and the renegotiation of NAFTA have been so contentious and emotionally

fraught. Due to the recentness of the renegotiation of NAFTA, this report does not comment on the effect it will have on Ohio's middle class.

Present realities matter even more. Virtually all interviewees, including those most wistful about the past, emphasized the need for those in Washington, DC, to devise international policies that reflect the circumstances Ohio's middle class now faces. They understand that the manufacturing sector will never account for the same proportion of high-paying middle-class jobs that it did in the 1950s. Yet, at the same time, they stressed how Ohio's manufacturing sector and its economy more generally have come a long way since the early 1980s, when the now resented and outdated "Rust Belt" label emerged. The structure of Ohio's economy and its outlook in 2018 are very different than they were in earlier decades. Chapter Three focuses on the opportunities and challenges arising for the middle class in Ohio's increasingly diversified economy. State officials will have to contend with a broad range of domestic policy dilemmas as they work to create good-paying jobs, make more Ohioans qualified for those jobs, and help support the working poor and those left behind by the modern economy.

Policies that account for places with diverse circumstances and challenges matter most. The six micro-case studies of Columbus, Cleveland, Dayton, Lima, Marion, and Coshocton, as detailed in Chapter Four, illustrate vividly the divergent fortunes of cities and towns in a changing global economy. There is clearly no single significant change to U.S. foreign policy that will advance the economic interests of the middle class, because those interests themselves vary. However, caricatures of the opposing interest of those in Trump and Democratic strongholds do not appear to reflect reality. Ohioans are not neatly divided into camps: isolationists versus globalists, protectionists versus free traders, supporters of a zero-sum versus positive-sum world. Most interviewees clearly identified themselves as globally oriented, in favor of foreign investment and fair trade on a level

playing field and adamantly opposed to seeing the world in zero-sum terms. The differences among Ohioans' opinions were more nuanced, as elaborated in their own words in Chapter Four, which is the heart of this report.

Based on the data and perspectives underlying these themes, as well as their own experiences in government, task force members identified five sets of policy directions and questions that policymakers will need to grapple with to better advance the economic well-being of America's middle class. Elaborated in greater detail in Chapter Five, they center on:

- 1. Clarifying the U.S. national economic interests
- 2. Linking trade to a comprehensive economic strategy
- 3. Developing a national strategy for foreign direct investment
- 4. Highlighting the economic trade-offs around defense spending
- 5. Defining the U.S. global leadership role and its economic implications

### CHAPTER 2

# HOW TRADE DID AND DID NOT ACCOUNT FOR MANUFACTURING JOB LOSSES

Ohio experienced an estimated net loss of 750,000 good-paying manufacturing jobs between 1969 and 2009. Why did that happen, and what were the consequences for middle-class households and communities across the state? Policymakers seeking to build broad-based support for their trade agenda must grapple with this question.

According to OSU's research, foreign trade accounted for no more than one-third of these manufacturing job losses in Ohio; a far greater number resulted from other factors, notably automation and domestic competition with other states. <sup>10</sup> It is vital to understand how these nontrade-related factors impacted Ohio's manufacturing employment over the last several decades, in order to appreciate why the economic well-being of blue-collar workers in Ohio cannot be advanced though adjustments to trade policy alone.

That said, it would be a serious mistake to minimize the impact of the trade-related manufacturing job losses. Everyone who lost a job due to outsourcing, offshoring, or import competition had family, neighbors, and local shops dependent on their businesses. Entire communities were devastated. Several hundred thousand Ohioans were directly or indirectly affected. And for many of them, this was not just about the loss of employment, but also the gradual unraveling of a de facto social contract that once existed between government, business, labor, and communities.

This chapter provides an account of how Ohio's middle-class fortunes became intertwined with manufacturing jobs in the 1950s-1960s. It reviews how so many of those jobs were subsequently lost in successive decades, due to both tradeand nontrade-related factors. And it examines the record of TAA programs aimed at easing the pain.

# Middle Class and Manufacturing Sector Thrive Together in the 1950s-1960s

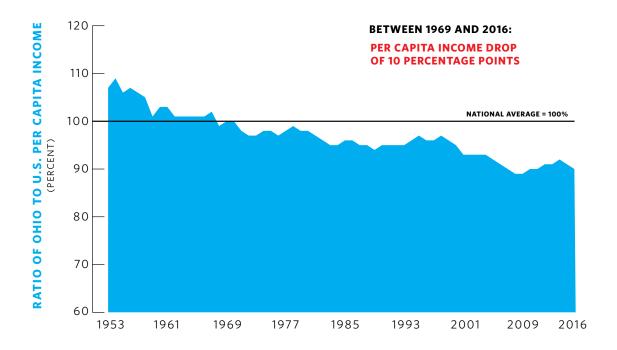
Ohioans point to the 1950s and 1960s as the economic golden years for the middle class. Most job seekers in those days did not need a college degree or advanced education to land secure employment that paid a decent wage. Such middle-class

jobs allowed Ohio workers to buy a house in a safe neighborhood, send their children to respectable public schools and local colleges, access employer-provided healthcare, take a yearly family vacation, and save for retirement. These Ohioans had every expectation that their children would climb even further up the economic and social ladder than they had. At the time, that is what it meant to be middle class in Ohio (African Americans, who represented 8 percent of the state's population at that time, did not, of course, experience the "middle-class dream" in the same way).

In the mid-1950s, manufacturing jobs accounted for almost half of all employment for Ohio's workforce. The manufacturing jobs paid 5 percent to 10 percent more per hour than other jobs performed by un- and semi-skilled workers, and they were generally accompanied by generous healthcare, leave, and retirement benefits.<sup>13</sup> Unionized workers in the automotive, rubber, and steel industries, which were concentrated in Ohio and the industrial Midwest, managed to secure even higher wages and benefits.<sup>14</sup>

FIGURE 3

Ohio's Drop in Income Relative to the United States



**SOURCE:** U.S. Bureau of Economic Analysis (BEA), national per capita personal income; and Federal Reserve Bank of St. Louis, FRED Economic Data, Ohio per capita personal income, https://fred.stlouisfed.org.

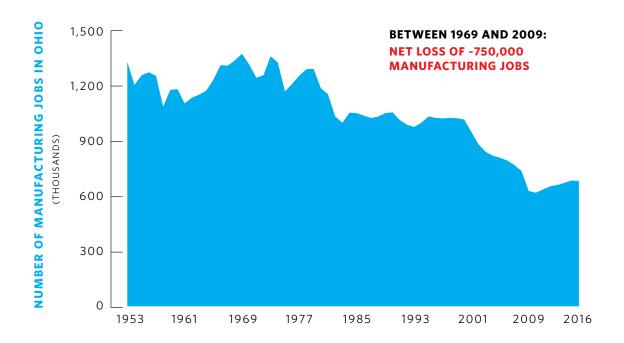
**NOTE:** Per capita income is based on annual data, not seasonally adjusted. The BEA's data were updated for the years 1998–2017, but to remain consistent with the methodology used for other years in this chart, an earlier version of the BEA data is used (from the Federal Bank of St. Louis). See Federal Reserve Bank of St. Louis, "Per Capita Personal Income in Ohio," accessed September 2018, https://fred.stlouisfed.org/series/OHPCPI.

Manufacturing firms could afford to pay the higher wages and provide good benefits for several reasons: they profited from the high demand for automobiles, consumer appliances, and other manufactured products that resulted from growing families and suburbanization in the post-Depression era; the firms experienced high levels of productivity growth as they reaped the benefits of higher levels of government spending on education, infrastructure (including the interstate highway system), and improvements in electrification;<sup>15</sup> and they faced little foreign competition because the productive capacities of Europe and Japan had been decimated by the Second World War. Finally, the auto, steel, and rubber industries in the Midwest enjoyed favorable antitrust protection from Congress.<sup>16</sup>

For these various reasons, Ohio enjoyed a per capita income exceeding the national average through the 1950s and 1960s. However, Ohio's per capita income dropped below the national average in 1969 and declined steadily for the next half-century. That drop coincided with the estimated net loss of 750,000 manufacturing jobs from their peak of almost 1.4 million in 1969 (see figures 3 and 4).

FIGURE 4

Ohio's Net Loss of Manufacturing Jobs



**SOURCE:** William Shkurti and Fran Stewart, "The Decline of Ohio," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018. Original data: U.S. Census Bureau, 1953–1989; Statistical Abstract of the United States, various years; Bureau of Labor Statistics, Employment in Non-Agricultural Establishments by Industry by State; Ohio Bureau of Labor Market Information, Current Employment Query, 1990–2016, http://ohiolmi.com/.

# Multifaceted Crises in the 1970s and Early 1980s

U.S. manufacturing employment nationwide suffered as the United States experienced recessions (in 1970 and from 1973 to 1975) and as unemployment and inflation—stagflation—rose astronomically. The economic challenges of the 1970s and early 1980s stemmed from various domestic factors, which policy-makers responded to with major shifts in monetary and fiscal policy. However, geopolitical shocks, foreign economic competition, and foreign policy also played significant roles.

Initially, the buildup to the Vietnam War—which was part of an ideological battle to defend democracy and free markets from the spread of communism—brought additional business to Ohio factories. However, as the war dragged on, its effect on the economy turned negative. Its mounting costs—on top of increased government spending for Medicare and other domestic programs under then president Lyndon B. Johnson's Great Society initiatives—exacerbated the nation's fiscal problems. The spending contributed to mounting inflation and increased interest rates, depressed investment, and high dollar valuation (albeit with a brief sharp drop when the United States abandoned the gold standard)—to the detriment of exports.<sup>17</sup>

Former president Richard Nixon's administration had to contend concurrently with crises in the Middle East as it dealt with the Vietnam War. The United States had been building close security and economic cooperation in the Middle East, particularly with Saudi Arabia, for decades. The intention was to strengthen shared opposition to the spread of communism and increase and sustain the steady supply of affordable oil. Despite close U.S.-Saudi relations, however, the

United States could not prevent the Organization of Arab Petroleum Exporting Countries (OAPEC) from declaring an oil embargo in 1973, exacting a toll on countries perceived to be supporting Israel during the Yom Kippur War. The OAPEC-induced oil crisis contributed to the recession of 1973–1975, which hit the manufacturing sector hard.<sup>18</sup>

Unlike much of the rest of the nation's manufacturing sector, where employment ultimately rebounded in the mid-1970s and peaked in 1979, Ohio's manufacturing sector did not. The dominance of the auto, steel, and rubber industries in Ohio accounted for much of this variance. These industries enjoyed antitrust protection, but it came with a downside: diminished imperative to innovate. <sup>19</sup> Even as the economy recovered, they still faced severe chal-

lenges from increased foreign and domestic competition and evolving demand for steel, and they were more sensitive to energy prices and currency fluctuations.

In terms of increased foreign competition, U.S. efforts to support the economic reconstruction of Europe and Japan after the Second World War created

The economic challenges of the 1970s and early 1980s stemmed from various domestic factors, which policymakers responded to with major shifts in monetary and fiscal policy. However, geopolitical shocks, foreign economic competition, and foreign policy also played significant roles.

new markets for U.S. products and helped resist Soviet expansion. However, this support also produced stronger competitors for U.S. manufacturers. Between 1950 and 1970, the European Community (EC) tripled its steel production.<sup>20</sup> In 1959, U.S. steel consumers began importing foreign steel when domestic producers could not meet the demand during a 116-day shutdown led by North America's largest industrial union, United Steelworkers.<sup>21</sup> In the 1960s and early 1970s, Japan emerged as a major player in the international steel market, achieving its peak production by 1973.<sup>22</sup> Throughout the remainder of the 1970s and early 1980s, Japanese industries benefited from their government's support, and as a result, Japan widened its edge in productivity over both the EC and the United States in terms of output per worker.

Ohio steel manufacturers also faced increasing domestic competition. Beginning in the 1960s, "mini-mills" sprang up in the South and West of the country. These small, nonintegrated plants leveraged modern technology that required less labor than traditional steelmaking technologies, lower operating costs due to recycling scrap into various rolled steel products, and less restrictive work rules to reap high profits and market share. The plants increased their share of U.S. steel production manifold times in the 1970s and early 1980s, while the industry as a whole suffered a slump in demand. Mini-mill products successfully competed with steel from Ohio's integrated mills in the construction market. And alternative materials to steel emerged in auto parts, appliances, construction, and consumer products.<sup>23</sup>

These factors visibly came to a head on September 19, 1977—"Black Monday"—when the Youngstown Sheet and Tube Company shuttered its Campbell Works, instantly laying off some 5,000 workers.<sup>24</sup> That was the first of five major steel mill closures in the area by 1981. In addition to the thousands of mill workers who lost their livelihoods, thousands more workers lost jobs in construction, railroading, trucking, steel fabrication, and other businesses connected to the steel mills. As fewer workers from these industries had money to spend in Youngstown and the surrounding Mahoning Valley towns, the local restaurants, retail shops, and other services also felt the economic pain. Within a decade, the region lost 40,000 manufacturing jobs. The region's tax base dwindled, restricting resources for local schools, social services, and economic development.<sup>25</sup>

As this crisis was unfolding in Youngstown, the nation at large was contending with mounting inflation, which had reached 11 percent by 1979.<sup>26</sup> In response, the Federal Reserve Bank tightened the money supply, allowing the federal funds rate to approach 20 percent. The recession of 1981–1982 followed, pushing unemployment to 11 percent. It was the worst economic downturn experienced between the end of the Second World War and the Great Recession of 2007–2009. Manufacturing and construction businesses in Ohio were hit especially hard.

Against this backdrop, at a 1984 campaign stop at the Ling-Temco-Vought (LTV) Steel plant in Cleveland, Ohio, then presidential candidate Walter Mondale criticized incumbent president Ronald Reagan's decision to lift quotas

on Japanese steel imports and claimed that "Reagan's policies are turning our industrial Midwest into a 'rust bowl.'"<sup>27</sup> The media adjusted Mondale's term to Rust Belt, which played off better against Sun Belt, a term coined to describe the U.S. Southeast and Southwest.

# Recovery and Stabilization in the Late 1980s and 1990s

Not long after Mondale coined the Rust Belt term, the U.S. economy began growing again and Ohio's manufacturing sector began to recover and stabilize. The shocks of the 1970s spurred industry restructuring and innovations that restored competitiveness. The loss of Ohio manufacturing jobs to domestic competition slowed. In 1967, Ohio accounted for 7.3 percent of U.S. manufacturing jobs, but by 1990, it only accounted for 5.4 percent; it has remained at or near that level since.<sup>28</sup>

The U.S. auto industry also eventually managed to claw back some of the market share it had lost in the 1970s and early 1980s. The revamped auto industry did not, however, revert to providing the type of employment it had offered prior to the 1970s, when it faced little competition from German and Japanese imports. As the industry bounced back in the 1980s, auto plants became more efficient, employing fewer workers, but foreign automakers began locating production in the United States. Thus, the local labor market effects played out unevenly in Ohio.<sup>29</sup> Communities such as Marysville and East Liberty benefited greatly when Honda established facilities there and created 14,000 jobs. But Lordstown saw employment at its General Motors plant drop from a peak of 12,000 employees in 1985 to fewer than 2,000 today. Cleveland, Dayton, and Mansfield lost entire auto plants.

### NAFTA

NAFTA went into effect in 1994. Republican and Democratic presidents negotiated it over several years, taking into account economic as well as national security and political considerations. It was assumed that the agreement would help secure the southwestern border by improving relations with Mexico and creating more economic opportunities for their citizens, thereby incentivizing Mexicans to remain in their country.<sup>30</sup>

Intense debate remains about the economic impact of NAFTA on Ohio's middle class. Some of NAFTA's staunchest critics contend it cost tens of thousands of jobs in Ohio and pushed down wages, as displaced workers had to take lower-paying jobs in other sectors.<sup>31</sup> Union representatives also explain that NAFTA led to reduced wages in the manufacturing industry, as the threat of offshoring undercut unions' negotiating position.<sup>32</sup> NAFTA's defenders counter with the benefits: boosting exports of agricultural products and services among many others; making North American manufacturers more competitive in the global market, thereby saving jobs in the long term; and making more products

available to American consumers at more affordable prices. Defenders explain that many of the near-term job losses would have been eliminated anyway due to automation and other factors.<sup>33</sup>

Leaving aside the ongoing debate, three points regarding NAFTA's effect on Ohio jobs deserve highlighting. First, manufacturing levels in Ohio remained constant through much of the 1990s (see Figure 4). Any significant number of Ohio manufacturing jobs lost due to the agreement appeared to have occurred from 1999 onward. Second, negative perceptions of NAFTA at least partially stem from concrete cases of key Ohio employers relocating production facilities to Mexico. For example, LG Displays, Goodyear Tire and Rubber Company, Delphi Corporation, and Honeywell International all moved production plants from Ohio to Mexico in the early 2000s. According to

The approximately 400,000 manufacturing jobs lost [in the early 2000s] were the most during any decade since manufacturing employment peaked in 1969. This was due to three dominant factors: China's accession to the WTO, automation, and the Great Recession.

Department of Labor data on TAA petitions, the most significant layoffs in the 1990s and early 2000s occurred among auto, steel, and electronics manufacturers, including General Motors, Severstal Warren, and Huffy Bicycle, each idling over 1,000 Ohio workers. <sup>36</sup> Finally, the total number of NAFTA-related job losses, while highly visible, were relatively small in comparison to those lost due to competition from China and other factors in the years 2000 to 2010.

# Staggering Jobs Losses in the Early 2000s

More than 1 million Ohioans worked in the manufacturing sector at the beginning of 2000. That number dropped to just over 620,000 in 2010; the approximately 400,000 manufacturing jobs lost were the most during any decade since manufacturing employment peaked in 1969.<sup>37</sup> This was due to three dominant factors: China's accession to the WTO, automation, and the Great Recession.

### China's Accession to the WTO

No longer willing to risk being shut out of China's rapidly growing markets as Asian and European competitors rushed in—and looking to promote and accelerate internal political and economic reforms through increased engagement in the new post-Cold War era—the United States formally extended Permanent Normal Trade Relations (PNTR) status to China in October 2000, paving the way for China's accession to the WTO with U.S. support. This effectively ended a process begun in 1980 in which Congress annually reviewed whether to waive high tariffs on imported Chinese goods. Although Congress had authorized the waiver each year, it was never a foregone conclusion, especially after the massacre at Tiananmen Square in 1989. China's PNTR status and formal accession to the WTO in 2001 created a new dynamic.<sup>38</sup>

After granting China the status, U.S. firms decided it was worth the sunk costs and risks to shift some production to China, where there were lower long-term labor costs.<sup>39</sup> Simultaneously, Chinese producers decided they could afford to rapidly expand into U.S. markets. And upon recognizing that China was entering a phase of comparative advantage with reduced labor costs, U.S. firms then accelerated domestic investments in automation and other technological enhancements to better compete. This trifecta precipitated a major net reduction in U.S. manufacturing jobs, disproportionately borne by manufacturing states like Ohio. The losses considerably offset the export-related jobs created in the United States as a result of increased market access in China.

Considerable economic research in recent years has sought to quantify the net impact of Chinese import competition on U.S. jobs in the 2000s. One officited study on the "employment sag" of the 2000s estimated that trade with China induced 985,000 manufacturing job losses in the United States between 1999 and 2011.<sup>40</sup> However, this study was not a state-by-state analysis and did not estimate the losses applicable to Ohio alone. The Economic Policy Institute (EPI) employed a different economic model to do such an analysis, concluding that trade with China cost Ohio 121,500 jobs from 2001 to 2015.<sup>41</sup> But the EPI figures are contested by academic economists, who believe the number would likely be lower if based on the more widely accepted methodology.<sup>42</sup>

An equally important question yet to be resolved is how to reconcile the significant losses of one sector or constituency with the more modest yet important gains of others. During the 2000s, Ohio-based exports to China grew steadily in goods (for example, oilseeds and grains, aerospace products and parts, plastic products, and navigational and measurement instruments) and services (for example, education and travel), supporting thousands of higher-paying jobs in those sectors.<sup>43</sup> Moreover, while increased trade with and investment in China displaced manufacturing jobs in Ohio, it also provided working families a wider selection of consumer goods at more affordable prices. Researchers at London's Center for Economic Policy Research recently calculated that average prices paid for manufacturing goods by U.S. consumers were 7.6 percent lower between 2000 and 2006 (dropping 1 percent each year) due to China's entry into the WTO.<sup>44</sup> Still, this same drop in prices for American consumers is seen as the result of China's currency manipulation, which suppressed the value of the renminbi during this period to make China's imported goods more attractive.<sup>45</sup>

### **Automation**

Just as the trade-related impacts varied considerably across industries in the 2000s, the same was true for the impact of automation and information technology. According to a recent study, between 2001 and 2010, automation, information processing, and other technological advances enabled triple-digit levels of growth in output and productivity in the computer and electronics sector.<sup>46</sup>

This also allowed for double-digit productivity growth in other industries, such as automobiles, chemical products, and primary metals. Almost 88 percent of all U.S. manufacturing jobs lost during the 2001-2010 study period was due to automation, not foreign trade. Although increased competition with Mexico and China—more than automation—accounted for the loss of lower skilled labor in

the textiles, furniture, apparel, and paper industries, none of these industries were a large part of Ohio's economy (except paper, which was also affected by the decline of printing and publishing). (Note, however, that some researchers believe the automation-related job losses are overstated, because they rely on methodology for calculating productivity gains, particularly in the computer industries, which they contest.<sup>47</sup>)

The major industries concentrated in Ohio are among those most exposed to automation and related job losses.

For manufacturing industries like those in Ohio, robotics is one of the main technologies that has displaced good-paying jobs. <sup>48</sup> According to the Robotic Industries Association, the automotive industry is the primary driver of growth in robotics, with plastics and rubber, semiconductors, electronics, and metals also showing significant growth. <sup>49</sup> Thus, the major industries concentrated in Ohio are among those most exposed to automation and related job losses.

# The Great Recession of 2007-2009

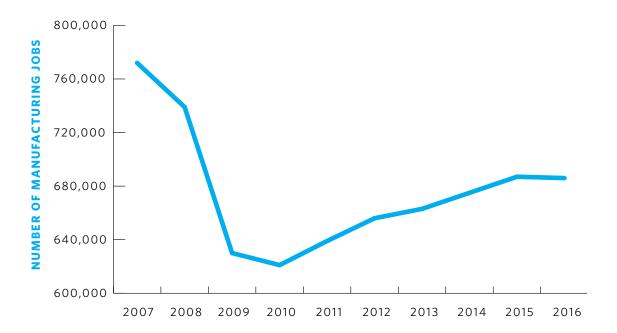
Notwithstanding the ongoing robots versus trade debate, few economists dispute the devastating impact of the Great Recession on Ohio's manufacturing industry. Even before it hit in December 2007, Ohio manufacturing job numbers had dropped from more than 1 million at the start of the decade to 772,000 (see Figure 4). Manufacturing employment levels plunged further to 621,000 by the end of the Great Recession in 2010. Recessions often hit the manufacturing sector harder than others, as evidenced by the loss of nearly 150,000 Ohio manufacturing jobs over just three years. But manufacturers have historically taken advantage of slowdowns to restructure and innovate, helping the sector to rebound, at least partially, in the post-recession period to a new equilibrium. The manufacturing job losses from the Great Recession, however, were especially deep and the recovery much shallower (see Figure 5).

Almost a decade later, Ohio's manufacturing employment remains well below levels seen before the Great Recession due to the aforementioned combination of factors: industry restructuring, innovation, automation, offshoring, and import competition (including due to mercantilist practices).<sup>50</sup> These factors permanently changed Ohio's manufacturing sector, and no strategy will bring back all the lost manufacturing jobs—not even to the levels of the 1990s.

This new reality has hit all of Ohio hard but especially subregions that were heavily dependent on manufacturing industry clusters that suffered huge downturns between 2000 and 2016. These areas include Dayton, Toledo, Youngstown,

FIGURE 5

Ohio's Manufacturing Sector Had a Shallow Recovery After the Great Recession



**SOURCE:** William Shkurti and Fran Stewart, "The Decline of Ohio," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018. Original data: Ohio Bureau of Labor Market Information, Current Employment Query, 1990–2016, http://ohiolmi.com/.

Warren, and their surrounding areas, where the automotive industry is clustered; Stark (Canton) and Butler counties, as well as around Cleveland, where iron and steel mills are concentrated; and Summit County (Akron), where the tire and rubber industry is located. A number of rural counties were also devastated. For example, Monroe County in Appalachia lost 99 percent of its manufacturing workforce since 1990—half of which can be attributed to the closure of one aluminum company. Montgomery, Marion, Richland, and Trumbull counties, which all had per capita incomes near or exceeding the national average in 1970, had fallen well below the national average by 2015. 52

#### The Mixed Record of Trade Adjustment Assistance

The potential for large numbers of U.S. manufacturing job losses due to foreign trade was anticipated long ago. In fact, in 1953, at the height of the U.S. manufacturing sector's dominance, David McDonald, then president of the United Steelworkers union, first floated the idea of TAA. As Edward Alden recounts in *Failure to Adjust*, McDonald was among the rare labor leaders who championed free trade. But he did so on the condition that free trade be paired with an ambitious government program to facilitate "adjustment" for American workers,

industries, and communities that suffered as a result of more liberal trade policies that would yield net economic benefits for the nation as a whole.<sup>53</sup> The precise nature of the adjustments have been the subject of intense debate ever since, often focused on income assistance and retraining for displaced workers and even tax breaks, technical assistance, and loans for adversely affected companies.<sup>54</sup>

In the 1960s, president John F. Kennedy was the first to introduce a TAA program as a way to shore up domestic political support for free trade on both sides of the aisle. He was determined to head off Soviet and Chinese attempts to undermine U.S. alliances in Europe and Asia and believed that increasing U.S. imports of allies' goods would strengthen ties with them.<sup>55</sup> Succeeding presidents from Nixon and Reagan to George W. Bush and Obama would come to view trade in similar terms—as one important component of binding like-minded allies together in the face of escalating geopolitical competition with adversaries and rising powers.

Successive administrations promoted trade liberalization over the next half-century, but trade adjustment assistance never kept pace and meaningful adjustment strategies for communities that lost their economic base never materialized. McDonald's vision was never realized. What emerged was only a shadow of what he had in mind, as opposition to the program persisted across the political spectrum. In the 1960s, the levels of assistance turned out to be far less than envisaged, thereby creating buyer's remorse for original trade skeptics who regretted having sold their support for free trade on the cheap. Nixon proposed a much more ambitious undertaking in the early 1970s, as part of his larger efforts to expand and overhaul unemployment insurance, but the proposal was largely rebuffed by business and labor alike, albeit for different reasons. Even the more modest version that Congress adopted, and which ended

up helping more displaced workers, cost \$4 billion in the 1970s. The high price tag provoked criticism of fiscal unsustainability and triggered substantial cuts during the Reagan era. Meanwhile, criticisms persisted regarding the inherent unfairness of the program. It provided support to foreign trade-displaced workers but not those displaced by domestic competition, automation, or changes in consumer preferences. And even with respect to the trade-displaced workers, the program was chastised for sustaining the unemployed rather than retraining them or helping businesses adjust to new economic realities, as originally promised.

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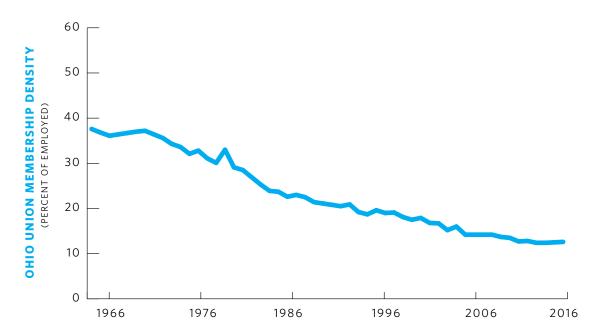
Bush worked with Congress in the early 2000s to augment financing and improve eligibility criteria for TAA. Obama followed with more ambitious proposals for widening its scale and scope—some of which Congress adopted as part of the American Recovery and Reinvestment Act of

2009. While Congress never took up Obama's most ambitious proposals, such as extending TAA-like benefits to all displaced workers, including those displaced by automation, it did augment the program in its TAA Reauthorization Act of 2015 (which continues through 2021).<sup>57</sup> Under this act, certified TAA benefits include reimbursement of training expenses; income support while in training after the expiration of unemployment compensation; reimbursement of job search and relocation expenses (up to \$1,250); a healthcare coverage tax credit; and an income supplement for workers over fifty years old who secured reemployment at a lower wage (up to \$10,000 maximum over two years).<sup>58</sup>

Between 2000 and 2016, an estimated 133,000 workers in Ohio were certified as eligible to receive TAA benefits. Seventy-five percent of these workers were certified on the basis of increased imports or shifts in production to a foreign country.<sup>59</sup> Even if eligible, not all participated.<sup>60</sup> And for those who did receive TAA benefits, comprehensive data are hard to come by on what percent secured reemployment at an equal or higher wage after having lost a good-paying manufacturing job due to trade.

Those interviewed for this report almost uniformly expressed the perception that, over the past fifty years, TAA has meaningfully helped only a minority of trade-displaced workers in Ohio. In its recent incarnation, the benefits have

FIGURE 6
Union Membership in Ohio Has Been Steadily Decreasing



**SOURCE:** Barry T. Hirsch, David A. Macpherson, and Wayne G. Vroman, "Union Density Estimates by State 1964–2017," 2018, http://unionstats.gsu.edu/MonthlyLaborReviewArticle.htm. For a description of the database construction, see Hirsch et al., "Estimates of Union Density by State," Monthly Labor Review 124, no. 7 (July 2001).

helped to cushion the immediate blow of getting laid off and have subsidized some costs of transitioning to a new job. But, generally speaking, interviewees described new jobs that required similar skills as the old ones but with lower pay or new jobs requiring much less skill at much lower pay,

Those interviewed also noted that the experiences of trade-displaced workers have varied considerably across the decades and in different firms—even within the same industries—due to the arrangements negotiated between labor and management. They viewed the lead time provided for layoffs, the company-provided support for reemployment, and the generosity of severance packages as considerably more important than TAA, especially for longtime employees. <sup>62</sup> Labor representatives stressed that trade- and automation-related job displacements have

often in a low-skilled service industry.61

The real challenge going forward is not to return the manufacturing sector to its previous levels of employment—that is no longer possible—but to restore a new social compact within Ohio's new, more diversified economy.

been occurring since the 1950s. However, the trauma created by these dislocations has been more acute in recent decades, because workers in many companies have had less say over the transition arrangements. Labor representatives cited this as one relevant effect of the decline in private sector union density over the past fifty years.<sup>63</sup> In the case of Ohio, the percentage of all nonagricultural unionized workers dropped from 37.2 percent in 1970 to 12.6 percent in 2017 (see Figure 6).

#### **Concluding Thoughts**

The above story is not just about the decline of employment in Ohio's manufacturing sector and the failure to provide adequate adjustment assistance. It is about the impact on communities that lost their resource base and their identities. They did not have the ability to quickly reload their employment base, and they frequently lost the ability to invest in their future. The story is also about the unraveling of a social compact among business, labor, and government that once worked for the middle class—by spreading prosperity more equitably across the state, bringing dignity and status to families and communities, and building a solid nexus between skills training and jobs. The real challenge going forward is not to return the manufacturing sector to its previous levels of employment—that is no longer possible—but to restore a new social compact within Ohio's new, more diversified economy.

#### CHAPTER 3

# DIVERGING ECONOMIC REALITIES FOR OHIOANS TODAY

Although Ohio, like many other industrial states, is going through a difficult transition, Ohioans stress that their state should not be defined by its past. Times have changed, and the economy has evolved considerably. Today, there are multiple economic realities that exist in Ohio, which once led the nation in providing broadly shared prosperity. A sizable number of middle-class households thrive in a modern, diversified economy, whereas others struggle to make ends meet. State officials and community leaders now grapple with complex and difficult domestic policy decisions to keep Ohio's middle-class dream alive in a new context.

This new context is defined by the following features:

- Ohio continues to enjoy strategic advantages that give reason for optimism about its economic future—the outdated Rust Belt label is misleading.
- While Ohio continues to be one of the nation's most important manufacturing states, the composition of its workforce has diversified and now resembles more closely the nation as a whole.
- New job openings exist everywhere, but many of the fastest-growing occupations pay wages insufficient to sustain a middle-class standard of living.

Ohio continues to enjoy strategic advantages that give reason for optimism about its economic future—the outdated Rust Belt label is misleading.

- Ohio still lags behind the national average in educational attainment beyond high school, although the gap is closing. This presents a major challenge for workforce development, especially outside the major metropolitan areas where higher-paying jobs are concentrated.
- Assumptions that Ohio is ultimately split by an urban-rural divide do not reflect the complex nature of the state's economic geography. For example, the economic outlook differs greatly across rural counties, notably between Northwest and Southeast Ohio.
- As in many states, critical funding shortfalls persist for major infrastructure requirements that could boost productivity, aid businesses, and create jobs.

 Current demographic trends show an increasing concentration of population and economic growth in certain counties and a slowing in many other counties, with some trailing the national average.

Governor John Kasich's administration launched several initiatives designed to create more middle-class jobs and help Ohio businesses and workers address the challenges described in this chapter. His successor, who assumes office in January 2019, will need to determine whether to continue, modify, or abolish them. They include:

- Privatization of some former Ohio Department of Development functions into a nonprofit corporation (JobsOhio)
- Creation of the Office of Workforce Transformation
- Identification of nine target industry clusters
- Reduction in personal income tax rates
- Establishment of a business income tax pass-through exemption to assist certain categories of small business
- Expansion of Medicaid
- Mandating of renewable energy standards

It is important to see this full picture to understand why changes to trade policy intended to help workers in specific manufacturing industries, while still highly relevant, can only address a fraction of the full range of challenges confronting Ohio's middle class. Such challenges, falling more squarely within the purview of state- and national-level domestic policy, are first discussed in this chapter, before then turning to the state's international exposure.

## A Resurgent Economy With Strong Comparative Advantages

In recent surveys, Ohio's businesses show record high levels of confidence in the economy, albeit with a slight tapering off in the last six months.<sup>64</sup> The state's unemployment rate, which peaked at 11 percent in 2009–2010 following the Great Recession, has dropped to 4.6 percent as of July 2018.<sup>65</sup> Ohio added 540,100 private sector jobs between 2011 and mid-2018.<sup>66</sup> Its economy grew 1.9 percent in 2017, just below the nation's 2.3 percent growth.<sup>67</sup>

Ohio still enjoys formidable comparative advantages that first attracted manufacturers to the state. Businesses locating in Ohio find themselves within 600 miles of 59 percent of the population of the United States and Canada. Goods produced or transiting through Ohio can be distributed cost-effectively using the inland waterways, railway lines, and interstate highways. Energy-intensive industries, in particular, find Ohio attractive: the state ranks seventh in natural gas

production, tenth in electricity generation, and twelfth in total energy production among the fifty states.<sup>69</sup> Ohio's abundant shale formulations will further attract private sector investors as the natural gas resource is developed. Renowned academic institutions in the state and region provide a steady supply of science, technology, engineering, and math (STEM) graduates, as well as other skills and talents businesses need. The state and private industries together contribute \$10 billion annually to science and engineering research.<sup>70</sup> State officials, businesses, and local communities take pride in partnerships they have built to advance economic development across Ohio.

Ohio has adopted a strategy for leveraging its competitive advantages to grow its more diversified economy. A combined workforce plan put forward by Kasich's administration targeted nine industries as the best prospects for generating economic growth and good-paying jobs now and into the future. These industries include advanced manufacturing, aerospace and aviation, automotive, bio-health, energy and chemicals, financial services, food and agribusiness, information technology and services, and logistics and distribution.<sup>71</sup> The industries are well-integrated into the global economy, account for most of Ohio's international trade, are attracting domestic and foreign investment, and are anticipated to employ up to 30 percent of Ohio's workforce.<sup>72</sup> In addition to providing goodpaying jobs, growth in these industries is expected to spur growth in small and medium-sized supporting enterprises.<sup>73</sup>

#### A Diversified Economy With a Changing Workforce

#### Manufacturing Remains Critical but Less Dominant

Ohio now has one of the country's most diverse workforces.<sup>74</sup> It remains an important manufacturing state, ranked third in the nation in 2016 by the value of its output, behind only California and Texas.<sup>75</sup> However, the combined service sectors—including banking, insurance, utilities, trucking, warehousing and storage, hospitals, nursing, and residential care facilities—now account for over three-fourths of the state's \$649 billion gross domestic product (GDP) and will account for most job growth in the future.<sup>76</sup> While manu-

facturing constitutes a larger share of Ohio's GDP than it does for the nation as a whole, other sectors are growing as or more quickly and occupying an increasing share of the state's economy (see Table 1).

Ohio now has one of the country's most diverse workforces.

The changing industry picture has thus changed Ohio's employment needs. Manufacturing today still accounts for 12.4 percent of Ohio jobs (higher than the national share), but this pales in comparison to the 1950s, when the sector at its peak employed 44 percent of all Ohio workers.<sup>77</sup> As discussed earlier, several factors explain this transition, including that robotics and other technological advances have made manufacturing industries far less labor-intensive.

TABLE 1

Ohio's Sectoral GDP Is Now More Reflective of National Trends

Industry	Share of Ohio GDP 2017 (%)	Share of U.S. GDP 2017 (%)	Mean Annual GDP Growth, Ohio 2010-2017 (%)
Financial Activities	20.4	21.0	4.6
Transportation, Trade, and Utilities	17.0	16.5	3.8
Manufacturing	16.6	11.7	4.0
Professional and Business Services	11.3	12.2	3.9
Government	11.0	12.1	1.7
Education and Health	9.2	8.4	3.2
Construction	4.0	4.3	7.9
Leisure and Hospitality	3.4	4.1	5.0
Information	2.6	4.8	-2.3
Agriculture, Mining, and Logging	2.4	2.6	13.0
Other Services	2.2	2.3	4.5

**SOURCE:** U.S. Department of Commerce/Bureau of Economic Analysis, "Gross Domestic Product by State (millions of current dollars), 1997–2017," https://www.bea.gov/data/gdp/gdp-state.

**NOTE:** The mean annual growth rate is the GDP compounded annual growth rate. "Other Services" includes noncategorized establishments engaged in providing a range of services from equipment and machinery repair to dry cleaning to pet care. Also included are private households that employ workers in activities primarily concerned with household operations.

The previous conception of thousands of workers manning the assembly line no longer applies. For example, many parts required for aircraft engines can now be made with 3-D printers, reducing part counts and simplifying the supply chain. And parts can even be serviced remotely, using modern information systems.<sup>78</sup>

Few factories in Ohio today employ more than 1,000 workers. Notable exceptions include Honda Motor Company Ltd. and General Electric—Ohio's top two largest manufacturers in 2018—which employ over 14,000 workers each.<sup>79</sup> Ohio's eighty steel and iron industry establishments combined directly employ 25,821 Ohioans.<sup>80</sup>

Yet, in comparison, Walmart now employs over 50,000 workers—almost double the number directly employed by the steel and iron industry.<sup>81</sup> More Ohioans today are employed in sectors other than manufacturing, such as trade, transportation and utilities, education and health, the government, and professional and business services. The healthcare industry in Ohio is expected to have the largest employment growth for the period of 2014–2024. The structure of employment in the state now more approximates the nation as a whole (see Table 2). Like the rest of the United States, many of Ohio's top domestic

TABLE 2

Ohio's Nonfarm Employment Is Now More Reflective of National Trends

Industry	Number of Employees in Ohio (Thou- sands, July 2018)	Share of Total Ohio Nonfarm Jobs (%)	Share of Total U.S. Nonfarm Jobs (%)
Transportation, Trade, and Utilities	1,040	19	19
Education and Health	938	17	16
Government	786	14	15
Professional and Business Services	729	13	14
Manufacturing	696	12	9
Leisure and Hospitality	577	10	11
Financial Activities	314	6	6
Other Services	221	4	4
Construction	226	4	5
Information	71	1	2
Mining and Logging	13	0.2	0.5
Total Nonfarm Employment	5,612		

**SOURCE:** Bureau of Labor Statistics, "Ohio Economy at a Glance," July 2018 data seasonally adjusted, https://www.bls.gov/eag/eag.oh.htm, data extracted October 5, 2018; Bureau of Labor Statistics, "Economic News Release: Table B-1 Employees on Nonfarm Payrolls by Industry Sector and Selected Industry Detail," July 2018 data seasonally adjusted, https://www.bls.gov/news.release/empsit.t17.htm, data extracted October 5, 2018.

**NOTES:** "Other Services" includes noncategorized establishments engaged in providing a range of services such as repair and maintenance, personal and laundry services, and membership associations and organizations. Percentages in table do not sum to 100 percent due to rounding.

employers are in the retail sector (see Table 3).<sup>82</sup> In Ohio and twenty-one other states, Walmart is the largest employer and has been in Ohio since 2002.<sup>83</sup> In contrast, in 1995, General Motors (63,200 workers), Ford (24,000), and General Electric (18,500) were three of the state's top five employers.<sup>84</sup>

The 1950s picture of Ohioans working in good-paying, unionized manufacturing jobs across the state no longer reflects the current reality. Unionized jobs in the manufacturing sector still provide a livable wage and solid benefits, hence why they are coveted and so much attention is rightly given to protecting them. But employment has diversified, and with it, unionization has changed.

As of 2017, 12.6 percent of all employed Ohioans were union members, above the national average of 10.8 percent. <sup>85</sup> Ohio remains one of the twenty-four states that do not have "right-to-work" laws designed to curb labor unions' collective-bargaining power. This remains a contentious issue of debate. Proponents argue right-to-work legislation would encourage businesses to move to Ohio at a time of fierce competition between states to attract domestic and foreign investment. However, opponents contend that it would further exacerbate the disempowerment of workers and ultimately lead to lower pay and benefits for them. <sup>86</sup>

TABLE 3

Ohio's Top Ten Domestic Employers, 2018

Company	Employees	Sector	Headquarters
Walmart Stores, Inc.	50,200	Trade (Retail)	Bentonville, AR
Cleveland Clinic Foundation	49,800	Health	Cleveland, OH
Kroger Co.	45,150	Trade (Retail Food)	Cincinnati, OH
The Ohio State University	33,300	Education and Health	Columbus, OH
Mercy Health	32,200	Health	Cincinnati, OH
Wright-Patterson Air Force Base	27,600	Government (Military)	Dayton, OH
University Hospitals Health System, Inc.	26,000	Health	Shaker Heights, OH
OhioHealth	21,100	Health	Columbus, OH
JP Morgan Chase & Co.	21,000	Finance (Bank)	New York, NY
Giant Eagle, Inc.	19,000	Trade (Retail Food)	Pittsburgh, PA

**SOURCE:** Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf.

#### The Challenge of Low Wages and Rising Household Costs

One reason why so much attention is paid to the impact of trade policy on the manufacturing sector—notwithstanding the variable and limited nature of its relevance to much of Ohio—is that the sector still provides some of the best-paying job opportunities for semi-skilled workers without postsecondary education. The alternative for the vast majority of those without college or advanced degrees are service sector jobs that do not pay enough to sustain a middle-class lifestyle.

For example, although Walmart employs many well-paid managers, its average worker earns about \$28,700 per year.<sup>87</sup> A typical auto parts manufacturing worker, by comparison, earns about \$58,300 per year, and workers employed in the state's iron and steel industry earn about \$65,700 per year.<sup>88</sup> Table 4 lists the median wages associated with the ten most widely held occupations in Ohio.

Registered nurses are an outlier in this list. Nursing jobs pay better but require higher levels of education and training, whereas most other occupations listed, which are accessible to those without a college degree, pay under \$33,000 a year.

Wages are only one part of the equation, however. The other side of the balance sheet, namely household costs, is equally important to determining whether a middle-class lifestyle remains in reach. The cost of living in Ohio is considerably lower than in most U.S. states, partly due to more affordable housing and the slower-growing financial service costs resulting from Ohio's competitive insurance markets.<sup>89</sup>

Within Ohio, the cost of living varies considerably. The EPI calculated that a family of four in Delaware County (one of the wealthy suburban counties in the Columbus metropolitan area) would need a household yearly income of approximately \$83,718 to meet its basic budget. This figure would drop to \$65,808 in rural Columbiana County.<sup>90</sup> The EPI defines a basic budget as what is required to maintain a "modest yet adequate standard of living," covering the costs of housing, food, transportation, childcare, healthcare, taxes, and other necessities such as household supplies. It does not include the costs associated with taking a vacation, saving for retirement, or paying tuition and paying off student loans for postsecondary education at a technical school, community college, or state university (leaving aside private education).<sup>91</sup>

Extrapolating from the EPI's data, a family of four living in Ohio in 2017 required, on average, a combined income of \$72,779 to meet a basic budget (assuming a four-year-old and eight-year-old). A typical family of three needed \$61,066 (assuming a four-year-old). Clearly, these figures exceed the wages on offer in the leading occupations across the state, thereby often requiring both parents to work. That contributes to the premium on childcare expenses included in the budget, especially for single-parent households.

According to the U.S. Department of Health and Human Services, childcare is affordable if it comprises 10 percent or less of a family's income. By this measure, slightly more expensive infant care is unaffordable for the majority of Ohio families. <sup>92</sup> In Ohio today, extrapolating once again from the EPI's data, almost 20 percent of the budget of a family of four, in which both parents work, goes toward

TABLE 4

Nine of the Top Ten Occupations in Ohio Are Low-Paying

Occupations	Employees	Median Annual Wage
Combined Food Preparation and Serving Workers, Including Fast Food	158,070	\$19,150
Retail Salespersons	152,410	\$22,190
Registered Nurses	124,620	\$63,300
Cashiers	119,860	\$19,360
Laborers and Freight, Stock, and Material Movers (hand, without power equipment)	111,410	\$26,800
Office Clerks, General	100,760	\$30,940
Waiters and Waitresses	96,160	\$19,240
Customer Service Representatives	90,090	\$32,240
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	83,560	\$23,920
Stock Clerks and Order Fillers	83,430	\$24,040
Total	1,120,370	

childcare (over \$13,500). On top of childcare, another 20 percent (over \$14,000) of a family of four's household budget goes toward transportation annually. The next highest expenditure is for healthcare (over \$11,000). Per capita healthcare expenditure in Ohio has grown much faster than the national average (22 percent between 2011 and 2016 compared to 18 percent nationally).<sup>93</sup>

It stands to reason, therefore, why foreign policy may not be uppermost on the minds of Ohio working families struggling to reconcile the costs they incur with the wages they earn. Debates about healthcare, parental leave policies, flexible work, telecommuting arrangements, and public transportation are more directly and obviously relevant for them.

#### **Chasing Wages: Skills Gap, Education, and Substance Abuse**

In the prevailing circumstances, one solution is to lower household costs. But it should be coupled with an effort to help Ohioans become qualified for betterpaying jobs. Those interviewed for this study repeatedly stressed that higherpaying jobs do exist, but many go unfilled due to a lack of qualified talent. Service sector jobs—doctors, nurses, lawyers, bankers, and insurance executives—pay enough, or considerably more, to sustain a modest, middle-class standard of living, but they generally require at least a bachelor's degree. And Ohio's educational attainment continues to lag behind the national average despite its growth (see Table 5).

A central facet of the state's workforce development plan therefore involves investing in post-high school education, apprenticeships, and certificate programs. There appears to be broad consensus for investing in the upskilling of Ohio's workforce, in principle, but such a stated goal remains difficult to translate

TABLE 5

Ohio's Educational Attainment Is Picking Up, But Lags Behind the National Average

	Populati 25+, 20	•	Populati 25+, 20	•
Educational Attainment	Ohio	U.S.	Ohio	U.S.
High School Diploma	83	80	90	88
Bachelor's Degree	14	16	17	20
Advanced Degree	7	9	11	12

**SOURCE:** U.S. Census Bureau, "Educational Attainment," 2017 American Community Survey 1-Year Estimates, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk; U.S. Census Bureau, "Educational Attainment by Sex: 2000," Census 2000 Summary File 3, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\_00\_SF3\_QTP20&prodType=table.

into practice.<sup>94</sup> Projections on workforce requirements vary considerably, thus there remains a risk of training workers for jobs that may not exist in the future.

Further, these higher-paying service sector jobs are not accessible to all geo-

graphically. They are disproportionately concentrated in the state's three largest metro areas: Cincinnati, Cleveland, and Columbus. The four counties where these three cities are located—Hamilton (Cincinnati), Cuyahoga (Cleveland), and Franklin and Delaware (Columbus)—are home to higher-paying jobs, including 56 percent of the 72,000 insurance and information technology jobs and 44 percent of the 540,000 bio-health service jobs in Ohio.<sup>95</sup> It is worth noting that Cuyahoga and Hamilton counties suf-

Projections on workforce requirements vary considerably, thus there remains a risk of training workers for jobs that may not exist in the future.

fered some of the state's largest manufacturing job losses between 1990 and 2016, but urban counties were better able to offset lost manufacturing jobs than were many of Ohio's smaller cities and towns because they had more diversified economies that benefited from universities, research and medical facilities, a better-educated labor pool, and airports with fairly robust connections.

Finally, in regions with fewer high-paying jobs, substance abuse is also a challenge. There is a clear connection between declining economic conditions—especially in those areas that suffered high numbers of job losses in the early 2000s—and the opioid crisis. For example, from 2011 to 2016, Marion, Montgomery, and Trumbull counties suffered some of the nation's highest death rates from drug overdose at 31.7, 42.5, and 34.2 deaths per 100,000 people, respectively. With the epidemic of opioid abuse, as well as the growing misuse of marijuana, Ohio employers complain about the difficulty in finding employees that test free of drugs.

## Promise and Challenges for Rural Ohio, Farming, Agribusiness, and Energy

The preceding sections may give the impression that the challenges facing Ohio's middle class principally reflect an urban-rural divide. But that would not be entirely accurate. Ohio is an agricultural heavyweight, and economic fortunes vary considerably across rural counties.

In Northwest Ohio, manufacturing and agriculture contribute significantly to economic growth and employment in rural areas. In 2017, Ohio ranked sixteenth in agricultural production. <sup>98</sup> Ohio farming remains fundamental to the enterprise, with over 75,000 predominantly family-run farms with long ties in the state. <sup>99</sup> But farm employment represents only a small percentage of the jobs associated with related food and agriculture activities. For example, almost 60,000 Ohioans are employed by the food and beverage manufacturing industries, which tend to be clustered nearer to metropolitan areas. <sup>100</sup> But even this number does not capture the complete supply chain of food production, processing, and retailing and food services.

In contrast to the northwestern rural counties, Ohio's rural Appalachian counties experience a very different reality than other regions. Technically, thirty-two of Ohio's eighty-eight counties—extending from the state's far northeastern corner to nearly its southwestern edge—currently fall within Appalachia's geographic boundaries.<sup>101</sup> Ohio's Appalachian counties designated as distressed or at-risk are primarily clustered in the southern and southeastern portion of the state.<sup>102</sup> These counties have the state's highest concentrations of poverty and unemployment. Southeast Ohio has the state's lowest level of educational attainment, with 17.1 percent of people ages twenty-five and older holding a bachelor's degree, compared to 26.7 percent for the state, and a higher unemployment rate of 6.3 percent, compared to 5.0 percent for the state, in 2017 (note that the state's unemployment rate dropped below 5 percent in 2018).<sup>103</sup>

Appalachia has had a negative economic outlook since the closing of many extractive industries in the 1940s and 1950s. Manufacturing closings have disproportionately hurt Appalachian counties because of the lack of alternative employment. Figure 7—which maps the large industrial sources of economic growth and employment—illustrates the disparity between the southeastern counties in Ohio's Appalachian region and the rest of the state.

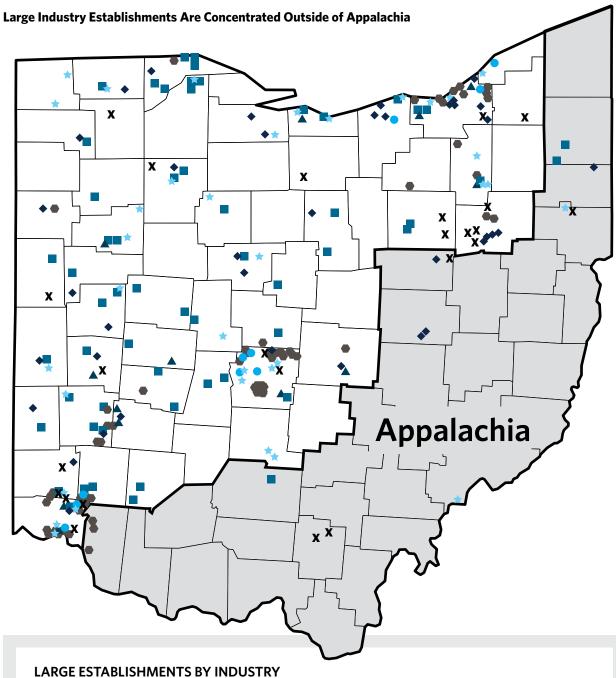
#### Much Hinges on the Energy Sector

Many people living in Ohio's southern and southeastern counties once depended on the coal industry and coal-fired electric power plants for middle-class jobs. However, in recent decades, employment levels in these industries have fallen due to automation and the shifting away from coal as an energy source.<sup>104</sup> Economic factors, as well as environmental concerns, provide a compelling reason to make the transition. New natural gas-powered plants are 40 percent to 50 percent more efficient than older coal-powered plants, resulting in substantially lower costs and cleaner energy.<sup>105</sup> But communities that have long depended on employment in the coal industry may continue to be hit hard because natural gas plants require differently trained workers.

Meanwhile the shale boom contributes very positively to Ohio's general economic outlook. But it remains unclear if it will yield long-term employment opportunities for Appalachia.

On a positive note, Appalachia may soon be home to a different source of energy employment—an ethane cracker plant that extracts natural gas and breaks ethane down into ethylene.<sup>106</sup> Foreign investors have considered putting this type of petrochemical plant in Ohio counties and those bordering in West Virginia. As discussed in Chapter Four, this plant could substantially benefit those in and near Belmont County.

FIGURE 7



- **Aerospace and Defense**
- **Auto Manufacturing and Assembly**
- **Bio-Health Manufacturing**
- **Chemicals and Polymers**

- X Food and Beverage
- **IT and Financial Servies**
- Machinery, Electrical Equipment, and Metals Manufacturing

#### Infrastructure Needed to Help Businesses and Create Jobs

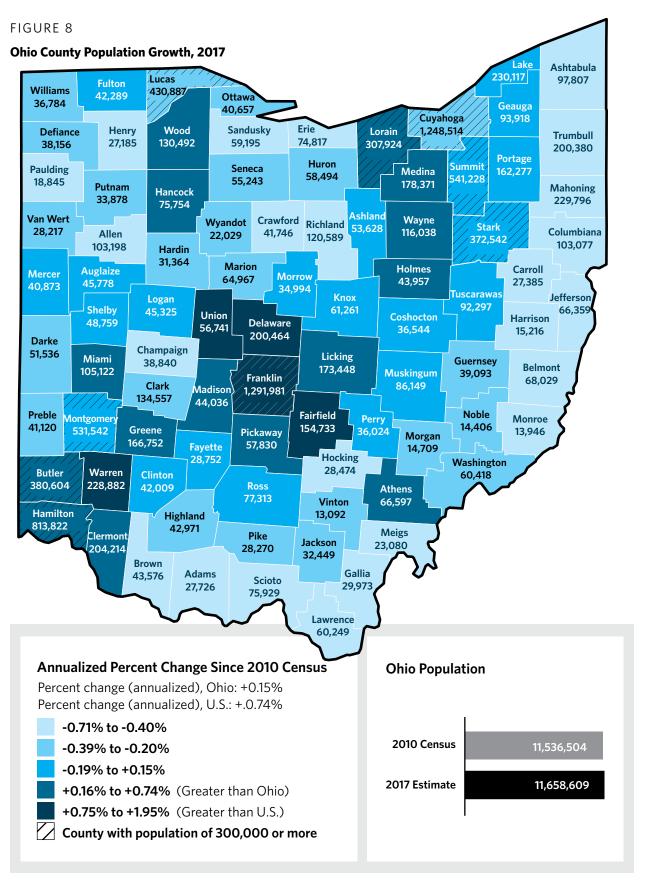
Local officials, economic developers, and middle-class families in both rural areas and big cities uniformly cite investments in infrastructure as vitally important to the economic well-being of Ohio's middle class. Ohio's strategy for growing the economy and creating good-paying jobs relies heavily on leveraging its locational and distributional benefits. That puts a particular premium on investing in the upkeep and modernization of its airports, roads, railways, and waterways to keep and attract manufacturers and logistics companies, in particular. Ohio also will need to sustain a cost-effective energy supply, reliable water supply, and wastewater management and treatment systems. It will need to make capital investments in education to compete in a marketplace increasingly driven by knowledge and talent.

In more remote areas, small business owners and middle-class families crave better internet access to take advantage of e-commerce—whether to sell products or purchase items that are cheaper or unavailable in their communities—as well as to telecommute and save on childcare. Those living in city outskirts seek a more extensive public transit network that might make it easier to switch to higher-paying jobs despite the extra commuting distance. Increased construction associated with infrastructure investment across all of these areas would create additional decent-paying jobs for mid- and unskilled workers.<sup>107</sup>

#### **Demographics**

The story of today's Ohio is informed by the state's demographic map. Businesses and foreign investors are attracted to where people have the skills for their jobs. At the same time, as the economic structure of Ohio changes, people move to where the jobs meet their talent, even if this means moving across counties or states. Generally, Ohio's growth has slowed, and the population is aging. From 2010 to 2017, Ohio's population grew 0.15 percent, compared to 0.74 percent nationally. Since 1960, Ohio's population growth has been lower than the U.S. average. In that year, Ohio accounted for 5.4 percent of the national population, but by 2010, Ohioans made up only 3.7 percent. Ohio's population share has stayed around that number since 2010. However, this leveling off is not true of all Ohio counties (see Figure 8). Some counties are growing quickly, while others are shrinking. As shown later in Figure 9, it appears that the counties that are growing are those that are doing well and are more globally connected.

Ohio's immigrant population is growing at a faster rate than the population as a whole, though the numbers still remain small relative to many other states.<sup>109</sup> Ohio maintains an overwhelming white majority (82 percent of the total population).<sup>110</sup> Immigrants account for only 4 percent of Ohio's population (with the largest numbers coming from India, Mexico, China, Germany, and Canada). Their education levels exceed those of the general population, with 42 percent of immigrants possessing a bachelor's degree or higher, compared to 26.7 percent



of Ohioans.<sup>111</sup> Immigrants accounted for 7.2 percent of employees in all professional, scientific, and technical services; 14.1 percent of workers in computer and mathematic sciences; 16.5 percent of workers in life, physical, and social sciences; and 23.2 percent of business owners in the state's capital.<sup>112</sup>

#### A Globally Connected Economy

The foregoing discussion may give the impression that Ohio is a closed economy. But, of course, it is not. The state continues to be well-integrated into the global economy through both FDI and trade. However, Ohio's sources of FDI and trading partners vary across the state, and therefore, counties and industries experience different effects from trade policy.

### Foreign Direct Investment Plays Prominent Role in Ohio's Economic Strategy

As already noted, one major reason why Ohio manufacturers were forced to become more technologically advanced and shed labor costs was the resurgence of competition from Japan and Europe in the 1970s and 1980s. Ironically, today, many Ohioans see Japanese and European investors as saviors in parts of the state reeling from the departure of U.S.-owned manufacturing facilities.

Direct FDI-supported jobs (not including the many indirect jobs also spawned by FDI) account for 4.7 percent of Ohio's workforce, in comparison to 4.2 percent nationally.<sup>113</sup> The over 247,000 jobs directly supported by FDI rivals those created by exports.<sup>114</sup>

JobsOhio, a private nonprofit corporation established by the state in 2011, plays a large role in marketing Ohio's regions globally. Those interviewed at JobsOhio and its regional economic development partners made clear that increased FDI was vital to creating more good-paying, middle-class jobs across the state. Each of Ohio's areas has distinct advantages it can market. For example, they can entice foreign manufacturing firms to locate facilities near smaller towns and in rural counties, where there is ample land available for new sites at affordable prices and lower labor and energy costs.<sup>115</sup> Table 6 illustrates the importance of FDI for Ohio's modern-day workforce, especially in the manufacturing industry.

Officials at JobsOhio and its partner organizations explain that this current FDI portfolio has resulted from several factors. The portfolio represents the natural evolution in the life cycle of foreign engagement. For example, Japanese companies first entered the market through exporting automobiles and electronics. Eventually, they opened up sales offices. They took up residence in Ohio. Their kids went to local schools. Deep human relations and ties were built. In time, Japanese companies also saw the business value of locating production in the United States. Japanese suppliers followed.<sup>116</sup>

The decisions of foreign and domestic investors alike are greatly influenced by issues such as prevailing tax rates, the regulatory environment, the human talent

pool, and site availability. But Ohio's economic developers stressed that foreign student enrollment, immigration, trade, and U.S. foreign relations were also relevant to their efforts to attract FDI. They spend a great deal of time nurtur-

ing relations with investors in G7 countries and pay close attention to how evolutions in U.S. foreign policies could affect investors' business decisions.<sup>117</sup>

Beyond the G7 partners, economic developers spend an increasing amount of time traveling to Asian countries anticipated to be lucrative sources of growth in FDI. China, in particular, is getting increasing attention. Ohio's economic developers scored a huge win by securing investment from the Chinese company, Fuyao Glass Industry Group, which now has its largest overseas investment in

Ironically, today, many Ohioans see Japanese and European investors as saviors in parts of the state reeling from the departure of U.S.owned manufacturing facilities.

Dayton (\$600 million). The rare size of the investment (not without serious challenges discussed in Chapter Four) could be seen as the first salvo of Chinese investments to come. One could argue that aspects of Ohio's relationship with China today resemble relations with Japan several decades earlier. Like Japan in the 1970s and 1980s, China has become the source of many of Ohio's imports and the resentment of manufacturing workers. Ohioans have begrudged the jobs lost due to Chinese mercantilist practices in the 2000s. Yet, at the same time, as had happened with Japan, Ohio is strengthening relations with China. The numbers of immigrants and foreign students from China continue to grow. Ohio

TABLE 6

Ohio's Top Ten International Employers, 2018

Employees in Ohio	Establishments in Ohio	Largest Facility in Ohio	Employees at Facility
70,405	798	Honda, Marysville	4,000
33,576	427	Fiat Chrysler, Toledo	5,900
30,582	560	DHL Supply Chain/Excel Inc., Westerville	3,400
21,343	560	Circle K, Geneva	3,000
14,792	195	Barrett Industries, Dayton	900
11,523	152	Shelly Company, Thornville	1,800
9,846	135	Nestle Prepared Foods Company, Solon	2,300
9,456	237	Luxottica Retail North America Inc., Mason	3,400
6,869	58	Securitas Security Services USA, Inc., Maumee	4,000
5,149	40	Fuyao Glass, Dayton	2,000
	70,405 33,576 30,582 21,343 14,792 11,523 9,846 9,456 6,869	Ohio         in Ohio           70,405         798           33,576         427           30,582         560           21,343         560           14,792         195           11,523         152           9,846         135           9,456         237           6,869         58	Ohioin Ohioin Ohio70,405798Honda, Marysville33,576427Fiat Chrysler, Toledo30,582560DHL Supply Chain/Excel Inc., Westerville21,343560Circle K, Geneva14,792195Barrett Industries, Dayton11,523152Shelly Company, Thornville9,846135Nestle Prepared Foods Company, Solon9,456237Luxottica Retail North America Inc., Mason6,86958Securitas Security Services USA, Inc., Maumee

boasts a total of 38,680 foreign students enrolled in its universities—the eighth-largest enrollment in the country—and 40 percent hail from China. 119

However, the trajectory of Chinese investment in Ohio will not be driven

Chinese investment in the U.S. was down 92 percent in the first half of 2018 from the previous year, arguably due to escalated tensions over trade and U.S. scrutiny of Chinese deals on national security grounds.

by economic considerations alone, as foreign policy and national security concerns loom large. Unlike in the case of Japan, China is not a treaty ally, dependent on the United States for its security, or aligned with American values and interests on the global stage. China is a near-peer competitor in the security realm, but it does not espouse democratic governance, human rights, or international financial institutions. Accordingly, the prospects for Chinese long-term FDI in Ohio remain uncertain. Opportunities for mutually beneficial investments and a foundation for human relations exist, but it may become increasingly difficult for states and Chinese investors to maintain a business-

focused firewall if national security considerations and foreign policies continue to elevate tensions. According to the Rhodium Group, Chinese investment in the U.S. was down 92 percent in the first half of 2018 from the previous year, arguably due to escalated tensions over trade and U.S. scrutiny of Chinese deals on national security grounds.<sup>120</sup>

#### Broad and Varying Types of Exposure to International Trade

Although Japan and Europe lead in FDI, Canada (38 percent) and Mexico (12 percent) accounted for half of the \$50 billion worth of goods Ohio exported in 2017, making Ohio the ninth top exporting state in the country. And Asia is becoming an increasingly important trading partner for Ohio. China accounted for the largest share of Ohio's \$67 billion worth of imported goods (19 percent) in 2016, just edging out Canada. Over the last eight years, China's share of Ohio's imports has generally remained constant, but its share of exports has increased. Last year alone, Ohio exports to China grew by 4 percent and to Southeast Asia by 16 percent. 121

The Trump administration's decision to renegotiate NAFTA and withdraw from the TPP were therefore highly consequential for the businesses and workers in tradeable sectors. Approximately 250,000 Ohio jobs are directly supported by exported goods, and by one estimate, 1.2 million Ohio jobs are affected by all forms of two-way trade. Indirect job functions supported by trade include the receiving, warehousing, and trucking of exported and imported goods; the selling of imported goods at stores like Walmart; and the provision of a broad range of financial, legal, and other business services supporting the transactions. The 1.2 million figure includes those jobs associated with the export of services, with an estimated value of \$14.2 billion and constituting almost one-fourth of Ohio's total exports in 2016. Trade policy is especially consequential for those

working in industries that account for the biggest share of Ohio's exports and imports (see tables 7 and 8).

While Ohio clearly has a major stake in trade policy, perceptions of how changes would impact Ohio's middle class vary considerably. Some of the state's key manufacturers are principal importers. For example, Nestle's Swiss-owned plant outside of Cleveland sources raw materials from a few regions overseas and produces goods at their plant largely for U.S. market distribution. Conversely, many of Ohio's soybean farmers are primarily exporters, shipping grain to

TABLE 7

Ohio's Top Eight Exported Products, 2017

Product	Ohio Export Share (%)	U.S. Export Share (%)
Industrial Machinery, Including Computers	18.0	13.0
Vehicles and Parts	15.2	8.4
Aircraft, Spacecraft, and Parts	9.6	8.5
Electric Machinery and Sound and TV Equipment	6.7	11.3
Plastics	6.1	4.0
Oil Seed and Miscellaneous Grain	3.6	1.7
Optic/Photo, Medical Instruments	3.3	5.4
Iron and Steel Products	2.7	1.2

**SOURCE:** Ohio Development Services Agency, Ohio Exports Report: 2017 (Columbus: ODSA, February 2018), https://development.ohio.gov/files/research/B2004.pdf.

TABLE 8

Ohio's Top Eight Imported Products, 2017

Product	Ohio Import Share (%)	U.S. Import Share (%)
Industrial Machinery, Including Computers	19.0	14.6
Electrical Machinery and Sound and TV Equipment	9.5	15.0
Pharmaceutical Products	6.9	4.1
Vehicles and Parts	6.9	12.4
Iron and Steel	4.8	1.2
Optic/Photo, Medical Instruments	4.6	3.6
Plastics	4.0	2.2
Knit/Crochet Apparel and Accessories	3.9	1.9

partners overseas. And still, others like General Electric, Honda, Fiat-Chrysler, and General Motors are both top exporters and importers, relying on global value chains to assemble their machinery, aircraft, and vehicles.

Ohio's counties also experience the benefits of exporting activities very differently. Export production is particularly centralized in wealthier urban areas like Cincinnati, Cleveland, and Columbus (see Figure 9).

For these reasons, among others, there is no simple answer to the question of how changes to trade policy might impact Ohio's middle class. The impacts vary considerably by industry and place.

#### Concluding Thoughts

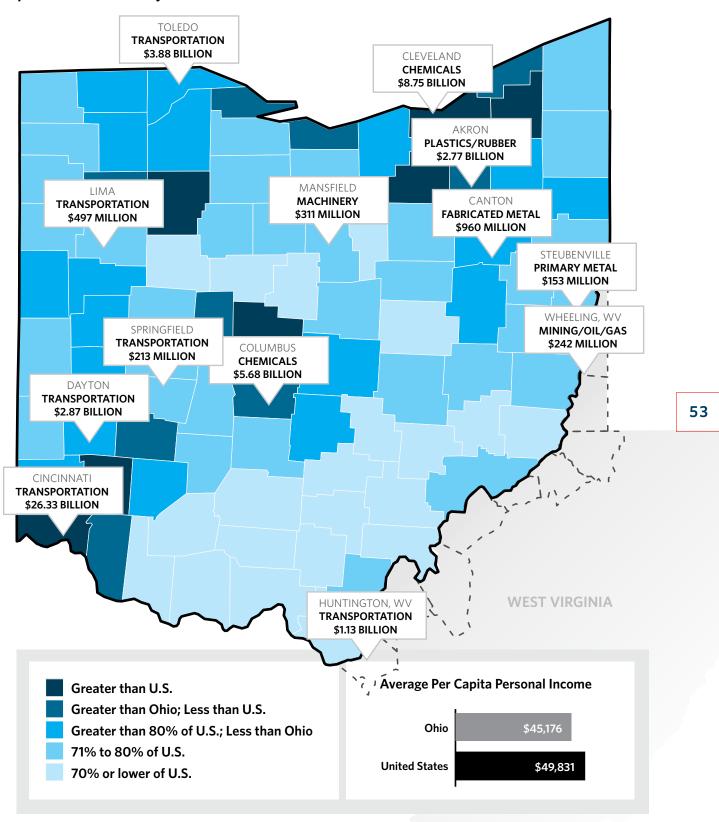
When looking at the history of the impact of trade policy on manufacturing employment, as described in the last chapter, it is easy to get the impression that it is among the most important determinants of middle-class economic fortunes in Ohio. It does remain an important factor, but just one of many, including the impact of trade policy on FDI and the growing service sectors.

Meanwhile, the state's executive and legislative branches must focus on the issues within their purview that are uppermost on the minds of working families. These include the state's economic strategy; tax structure; approach to attracting and retaining business through tax abatements and other incentives; "right-to-work" legislation regarding unions; resource allocation and goals for education, workforce development and training, and infrastructure; priorities for investments in distressed communities; and substance abuse.

In tackling these policy issues, state officials face real dilemmas and tradeoffs. The opportunities and challenges affecting the middle class are not spread out evenly across the state. Very different economic realities now exist in very different "Ohios." To determine whether big changes to U.S. foreign policy are required to aid Ohio's middle class, one must delve deeper into the varying perspectives found across different industries and places.

FIGURE 9

Export Production Is Mainly Concentrated in More Affluent Counties



**SOURCE:** Ohio Development Services Agency, "Ohio Exports Report: 2017," February 2018, https://development.ohio.gov/files/research/B2004.pdf; Ohio Development Services Agency, "BEA Per Capita Income 2017," May 2018, https://development.ohio.gov/files/research/E1002.pdf; Bureau of Economic Analysis, "SA1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income," United States and Ohio 2016, updated September 25, 2018, https://apps.bea.gov/iTable/iTable.cfm?acrdn=6&isuri=1&reqid=70&step=1#reqid=70&step=1&isuri=1.

NOTE: Values represent the total exports from the metropolitan area and largest export sector. Transportation includes aircrafts and parts.

#### CHAPTER 4

# VARYING LOCAL PERSPECTIVES ON THE U.S. GLOBAL ROLE

Those interviewed in rural areas and big cities, in both Trump country and traditional Democratic strongholds, send the same message: the United States must be constructively engaged in the world to keep the country safe, first and foremost, but also to advance the economic well-being of America's middle class. The question is not whether the United States and Ohio need to be internationally oriented, but how. There is no single answer. The answers frequently depend on whether you are analyzing macroeconomics and geopolitics on a global scale, advancing industrial interests, or simply safeguarding the prosperity of your local community.

The community or "placed-based" view is the focus of this chapter. The perspectives of people focused on the local community often receive less attention in Washington, DC, but they offer vital insights due to their wide variance across cities and towns. From the following micro-studies on six locales—Cleveland, Columbus, Coshocton, Dayton, Lima, and Marion—emerge both common and different challenges related to globalization and trade, economic diversification, wages, and dependence on defense spending. The economic and political diversity of each area, and the divergent views emerging from them, are summarized in Table 9. Before detailing the results of the six micro-studies, it is important to briefly discuss the macroeconomic and geopolitical perspectives, as well as the industry-based perspective.

### The Macroeconomic and Geopolitical Perspective That Dominates Policymakers' Attention

The macroeconomic and geopolitical perspectives dominate thinking and actions among the international economics and national security communities in Washington, DC. Over the last several decades, Democratic and Republican administrations alike determined that the best way to promote America's prosperity was by expanding the global community of market-based democracies and by managing shocks and preventing crises that could threaten macroeconomic stability. To be sure, they undertook many diplomatic efforts to secure contracts or trade benefits on behalf of U.S. firms, but this was part of a broader strategy to support the expansion of market forces and promote strong, balanced, and sustainable growth.

The core elements of the broader strategy have included U.S. government officials and business executives regularly engaging and encouraging other countries-major economic powers in particular-to adopt sound fiscal and monetary policies, pursue structural reforms to encourage investment, and promote fair and open competition. The strategy has also included the United States serving as the lead sponsor of key international institutions like the IMF, World Bank, and WTO, as part of strengthening international rules and institutions that reinforce U.S. efforts. At times, U.S. officials have pursued coordinated international efforts like the Plaza Accord to manage perceived mismatches of exchange rates and enshrine principles against currency manipulation for the purpose of boosting exports, as China was called out for doing in the early 2000s. A key part of U.S. international economic policy has also been focused on the world's poor. The United States has led efforts to reduce the debts of poor countries whose fragility risks precipitating security and economic risks that spill across borders—while providing them privileged access to the U.S. market with preferential tariffs.

Over the last decade, perhaps the most vivid illustration of U.S. leadership in the international economic realm came in the wake of the global financial crisis in 2008. Then president Bush convened the G20 in Washington to coordinate shared commitments to using all fiscal and monetary tools available to stabilize economic growth and forswear protectionist measures. Critics highlighted the irony of the United States' role in responding to the crisis given that it emanated from poor U.S. regulation of a massive financial bubble. Nevertheless, the size of the U.S. economy and the dominance of the dollar in global finance mean that Washington's engagement has been essential in setting global rules around trade, finance, and investment.

These efforts run parallel to political and diplomatic involvement across a range of potentially destabilizing developments: armed confrontation among nations; denial of access by state or nonstate actors to key arteries of commerce (on land, at sea, in space, or across cyberspace); deliberate efforts by friends or

Those interviewed for this study tended to focus on what was visible to them, namely the localized effects of trade, defense spending, and foreign direct investment.

foes to disrupt the supply of oil and other critical energy sources to global markets; sustained increases in major terrorist attacks, including cyber attacks on critical infrastructure; successive natural disasters that overwhelm international capacity to limit the damage; and the outbreak of global pandemics that freeze the flow of people and goods.

U.S. intelligence agencies keep close watch on the geopolitical and security developments that could affect the

global economy. The U.S. military presence and projection of power worldwide provide a powerful deterrent against some of them. Government officials in the commerce, defense, homeland security, justice, state, and treasury departments

exhaust U.S. influence to mobilize international action and cooperation to head off these crises or manage their aftermath, where possible.

It is near impossible to quantify the economic value of all this activity for America's middle class. And it is unreasonable to expect local officials, small business owners, or working families in cities and towns across Ohio or elsewhere to be able to comment on it or assess the implications of the counterfactuals. For example, they have no way of assessing what would have happened had the United States opposed granting PNTR status to China. Would the Chinese economy have grown more slowly? Would the impact on Ohio jobs have been markedly different? Those interviewed for this study tended to focus on what was visible to them, namely the localized effects of trade, defense spending, and foreign direct investment (which is influenced by and shapes foreign policy but falls within the purview of domestic policy).

Most state and local officials, economic developers, small business owners, and community leaders interviewed indicated that they need to trust the professionals in government to manage geopolitical developments and evolutions in the global economy responsibly. They also need to defer to big corporations and industry associations to assess the details of individual foreign policies and the specific provisions in free trade agreements. These big players alone have the dedicated resources to assess the myriad ways U.S. foreign policy affects their interests and to fight for their interests in Washington, DC. Those interviewed appeared to believe the system worked when trust in government was high and the interests of the various industries and workers were aligned. But it was a different proposition when trust eroded, industries' positions conflicted, and/or the concerns of working families appeared to take a back seat to the bottom lines of big corporations and special, moneyed interests.

### Alignments and Conflicts Within Industry-Based Perspectives

Ohio is home to many different industries that are deeply integrated in the global economy—from the farmers who export their grain to the automakers and other manufacturers that rely on global value chains and open markets to produce and sell their products. There are many occasions when these industries and their workers all benefit from specific activities the United States undertakes, but there are also cases where interests across industries, or within them between management and labor, conflict.

The national attention now focused on the "winners and losers" of the Trump administration's recently imposed tariffs on imported aluminum and steel and imported Chinese goods, as well as the retaliatory measures those tariffs have invited against U.S. exported goods, highlights the ways in which various industries' interests can differ. Likewise, questions are being asked about how U.S. businesses will ultimately react to newly negotiated provisions in the UMSCA

that aim to help American workers by, for example, raising wage requirements to qualify for preferential tariffs. These various topics merit exhaustive study in their own right. Only a few illustrative examples of alignments and conflicts arising from an industry-based perspective are noted here, however, because

the focus of this chapter is primarily on the perspectives of local communities.

Industry and labor representatives express broad support for various types of U.S. development and disaster assistance that grow export markets and prevent precipitous downturns.

An aspect of foreign policy where interests across U.S. industries, as well as between management and organized labor, appear to align is in helping grow markets for U.S. goods and services. These efforts might range from trade agreements that break down barriers to development assistance that encourages the emergence of more consumers abroad. A representative of Ohio's Farm Bureau strongly stated that U.S. efforts to grow the global middle class are good for Ohio's middle class, because as more of

the world's poor moved into the middle class, particularly in China, India, and other Asian countries, protein consumption increased. This, in turn, increased demand for Ohio's grains for livestock and various processed foods; for Ohio's light vehicles and parts; and for higher wages in those countries, thereby diminishing wage advantages they had over American workers. Persentatives of these different Ohio constituencies all saw this type of overseas development assistance, when effectively delivered, as manifestly in U.S. interests. They and others distinguished such assistance from the type of "nation-building" the United States has pursued in Afghanistan and Iraq for the past few decades.

Extrapolating from this thinking, it becomes clearer why industry and labor representatives express broad support for various types of U.S. development and disaster assistance that grow export markets and prevent precipitous downturns. There is a clear belief that we do not live in a zero-sum world and that countries and organizations should share the burden of maintaining stability. Other countries' gains or losses can benefit or hurt American working families. Ohioans remember well how an 8.9-magnitude earthquake and tsunami in Japan rippled through Ohio's economy in 2011 as Honda and other automotive facilities and their suppliers faced serious disruptions. 128

The next overseas crisis that impacts Ohio economically may not be a natural disaster. It could be a pandemic disease, for example. Researchers at the Centers for Disease Control and Prevention (CDC) recently illustrated how an epidemic spanning nine countries in Asia (Ohio's fastest growing export market) could cost the United States over \$40 billion in export revenues and put more than 1 million U.S. jobs at risk. Ohio exports almost \$6 billion worth of goods to forty-nine countries that the CDC treats as global health security priorities.

The interests of industries and organized labor appear to be strongly aligned when viewed through the prism of increasing exports and inbound foreign

investment. That is not necessarily the case, however, when considering the outsourcing or offshoring of U.S. production as part of global value chains.

Motor vehicle and automotive parts production, which have long been activities central to Ohio's economy, provide an instructive example of this conflict. Nearly \$192 billion in new passenger cars and light trucks and another \$149 billion in automotive parts entered the United States from more than thirty-five countries in 2017.<sup>131</sup> General Motors, which has ten assembly plants in the United States, including one in northeastern Ohio, also has manufacturing operations in sixteen other countries, including four plants in Mexico.<sup>132</sup> Ford has eight assembly plants in the United States and twenty-six others spread across sixteen different countries.<sup>133</sup> In 2015, its Medium Duty Truck Assembly plant relocated from Mexico to Avon Lake, Ohio, and the company has two major engine plants in the state (in Cleveland and Lima).

From the perspective of major automakers, they benefit when the United States helps to bring stability to various countries playing a critical role in global value chains. It is not as clear-cut for American autoworkers. They stand to benefit from their employers' profitability. Yet they could potentially benefit even more, if due to instabilty overseas, auto companies were forced to relocate more production facilities back in the United States.<sup>134</sup> The economic interests of American autoworkers are closely tied to trends in global value chains, especially with respect to the North American production platform and growing emerging markets overseas. U.S. automotive supply chains remain largely domestic, and supply chains in North American trading partners Mexico and Canada are largely assumed to complement, not substitute for, U.S. activities. However, in testimony before the U.S. House of Representatives Committee on Ways and Means (a trade subcommittee) in July 2017, Susan Helper—professor of economics at Case Western Reserve University in Cleveland and former chief economist at the U.S. Department of Commerce—warned of "the movement of large chunks" of the U.S. automotive supply chain abroad. 135

The Trump administration's recent imposition of tariffs on steel and aluminum imports and the retaliatory measures they have triggered from other countries further underscore where the interests of different industries trade off against one another. Trade-offs can even exist within the same industry. The situation is too fluid, and there are too many gaps in information to attempt a cost-benefit analysis for Ohio's main industries in this report. But see Appendix B for a snapshot of how the tariffs on steel are affecting some vital industries, such as agriculture, auto, and steel, in Ohio.

#### **Locally Based Perspectives**

When one industry dominates a particular place, as the steel industry did in Youngstown, Ohio, in the 1970s, then its interests and the city's fate are inextricably intertwined. But today, Ohio's cities and counties tend to have more

diversified local economies. Differences in the mix of industries making up those local economies lead to varying views, particularly on trade policy and defense spending, as they are the most visible localized effects of foreign policy.

Many of those interviewed in Columbus offered thoughts about the local economy and U.S. foreign policy that echo what one might also hear in Boston, Massachusetts, or Arlington, Virginia. But just one hour's drive away from Columbus, in Coshocton and Marion counties, views are quite different. This might indicate that such differences simply reflect a divide between big urban centers and more rural areas and smaller towns, but Ohio's two biggest cities, Cleveland and Columbus, now experience very different demographic and economic trends. Midsize cities like Dayton, and smaller ones like Lima, meanwhile, are far more dependent on defense spending than trade—the latter being the dominant topic of conversation in most other locations.

#### Columbus—A Modern Twenty-First-Century City

Columbus is Ohio's state capital and home to OSU and several other major academic institutions. With a population of nearly 880,000, it has grown to be the state's largest city. According to U.S. census data, it is the eighth-fastest-growing city in the country, after San Antonio, Phoenix, Dallas, Fort Worth, Los Angeles, Seattle, and Charlotte. Government and educational activities dominate the Columbus economy, but the region is home to headquarters for major insurance, retail, utility, and healthcare companies. Its diversified economy, which also includes strong presence in banking, logistics, fashion, research, and manufac-

turing, make it, as one observer described, a thriving example of the "modern twenty-first-century city." <sup>137</sup>

In 2010, Columbus economic development officials and business leaders set a bold goal of bringing 150,000 new jobs to the eleven-county Central Ohio area, including Marion, by 2020. They hit that mark two years ahead of schedule.<sup>138</sup> Columbus 2020 is on pace to meet or exceed two other goals: attracting \$8 billion in capital investment and raising the area's per capita income by 30 percent. In July 2018, regional unemployment was at 4 percent.<sup>139</sup> Interviewees in other communities claim that Columbus's tight labor market is now pulling talent out of their regions.

According to city planners and economic developers, one of Columbus's biggest selling points to investors has

been the successful track record of government, business, and community leaders working effectively together and across party lines to create an environment conducive for investment. The presence of OSU, which draws nearly 60,000 undergraduate and graduate students to Columbus, is also a major factor. It is a talent magnet for the region, which has succeeded in attracting domestic

One of Columbus's biggest selling points to investors has been the successful track record of government, business, and community leaders working effectively together and across party lines to create an environment conducive for investment.

and foreign investors alike. Among first-time, degree-seeking undergraduates enrolled at OSU in fall 2016, 23 percent came from states other than Ohio and another 11 percent came from other countries.<sup>140</sup> OSU's foreign student enrollment increased 15 percent between 2011 and 2017.<sup>141</sup>

Columbus officials and economic developers said the city started "thinking globally" in earnest only relatively recently.<sup>142</sup> The city had been perennially underperforming in exports and FDI, especially relative to other cities in the Midwest. Therefore, they adopted a comprehensive trade and investment plan in 2014. The stated goals for 2020 include making Columbus one of the top twenty-five U.S. metropolitan areas in exports (it was thirty-seventh at the time), increasing FDI from 40 percent to 50 percent of all active projects, and increasing non-Japanese FDI from 40 percent to 55 percent.<sup>143</sup>

Since 2014, the region's efforts have been supported by federal government programs, such as the Department of Commerce's SelectUSA program. For example, contacts made through that initiative enabled regional leaders to secure investment from the European Sofidel Group, which in 2016 broke ground on the construction of a tissue factory in Circleville, Ohio, that will employ about 300 people. That said, SelectUSA remains a relatively modest undertaking. And Columbus economic developers strongly prefer to rely on their own local partnerships and business contacts to sell the Columbus region internationally because they know its strengths best and are competing against other U.S. cities for foreign investments. They do not expect a greater level of direct assistance from federal officials, recognizing that such a role would put them in a difficult or inappropriate position to be picking winners and losers among U.S. cities. In any event, Columbus officials have already made inroads and built strong personal relationships in key investment hubs around the world, including most recently in China.

Columbus officials weigh many foreign policy-related issues according to the potential impact on efforts to attract FDI. One leading economic developer for Ohio's central region stressed that when two-way trade increases, immigrants succeed, and more foreign students enroll in local universities, human relations improve and send the signal that foreigners and their contributions are welcome. The most consistently critical voices regarding the Trump administration's tough stands on trade, immigration, and U.S. allies (who also happen to be among Ohio's most important investors and trading partners) were heard in Columbus.

Franklin County, which encompasses Columbus, was home to more than 56,000 Asian residents in 2016, or roughly 4.6 percent of the county's total population of 1.23 million. It was home to nearly 63,000 Hispanics—of which 35,500 (2.9 percent of Franklin County's total population) were Mexican. "Years ago, we decided we were going to work to attract the best people," said a Columbus official. "We were going to make immigration a strategy." He questioned how other communities could possibly want to turn away people who were willing to risk everything to come here. "I'll play those numbers all day if you want to be here because you want to have a better life."

Many interviewees demurred when asked about the near-term winners and losers in Ohio of the imposition of tariffs. They said much remained unclear or uncertain and that it was too early to tell. They did not want to be picking sides among various industries that were each important to Ohio's economy. And they avoided engaging in what was seen as a political debate. Nevertheless, they expressed serious concerns that sustained unpredictability and uncertainty could have a chilling effect on investment over the longer term, undermine currently high levels of business and consumer confidence, and dampen what was an otherwise favorable economic outlook. One city planner and trained economist also worries about second- and third-order effects of the steel tariffs. For example, he predicts that office and housing construction will slow as the price of steel rises, which would, in turn, undermine campaigns to bring in investment. His message contrasted with that of many interviewees elsewhere in the state, who expressed appreciation for what they saw as Trump standing up for the U.S. worker and disappointment with past administrations' inadequate responses to unfair foreign trading practices. For the city planner, the current trade debates detract attention from issues that really could boost the city's effort to increase foreign investment, such as getting direct international flights into the Columbus airport.<sup>148</sup>

There are ample reasons for those in Columbus to be averse to big foreign policy changes that could introduce strategic risk for investors. Things are going well, economically, especially relative to much of the rest of Ohio. However, this is not to suggest that Columbus is without serious social or economic challenges.

One of the region's biggest economic challenges is shared by many other cities and towns across Ohio and the nation: too many jobs do not pay enough to

Many interviewees demurred when asked about the nearterm winners and losers in Ohio of the imposition of tariffs....

Nevertheless, they expressed serious concerns that sustained unpredictability and uncertainty could have a chilling effect on investment over the longer term.

make ends meet. An April 2018 report from Policy Matters Ohio, a progressive research and policy group, found that six of the ten most common jobs in the Columbus area pays less than \$12 an hour, or, as the report detailed, less than necessary to sustain a family of three without public assistance for food and healthcare. These six occupations alone account for nearly 130,000 Columbus-area workers, or roughly 13 percent of all jobs. The preponderance of low-wage work has dragged down per capita income in the Columbus metropolitan statistical area (MSA), which was approximately \$2,000 below the national average in 2016. For those contending with such low wages, it is understandable how foreign policy would not be their main consideration. They need to worry about housing and

transportation costs, arrangements for childcare when both parents must work, and the rising costs of healthcare. The savings accrued on vehicles, household appliances, clothing, and food as a result of trade make a material difference but pale in comparison to those other costs, which account for the lion's share of their household budgets.

#### Cleveland—A Twentieth-Century Industrial Powerhouse

Columbus is Ohio's largest city; Cleveland used to be.<sup>151</sup> Cleveland's population peaked at 914,000 in 1950. It had shrunk just below 400,000 as of the last census conducted in 2010 and has dropped further since.<sup>152</sup> The population of the five counties making up the Cleveland-Elyria-Mentor MSA has been declining since 1970, except for a brief turnaround seen in the 2000 Census.<sup>153</sup> The upending of decades-long population hierarchy alone speaks volumes about the different trajectories of the two economies. As noted above, Columbus may be an archetype of the modern twenty-first-century city, but Cleveland still bears the imprint of being an early twentieth-century industrial powerhouse.

In 1970, in Cuyahoga County, the metropolitan region's per capita income was 15 percent above the national average; by 2016, 0.4 percent above.<sup>154</sup> The Cleveland area has suffered due to its loss of manufacturing jobs and paucity of growing industries. "We have a lot of mature industries," said one longtime Cleveland observer. "They weren't going to grow; they aren't in the growth stage." From 2010 to 2017, the Cleveland metro area added less than 7,700 jobs. The Columbus 2020 region added 150,000.156

For some long-time Cleveland residents, Warner Swasey's long-abandoned office building and plant, decaying since 1985, is just one constant reminder of the difficulties of transitioning out of the past and toward the future. In fact, across Ohio and its adjoining states are cities and towns that were anchored by plants and associated buildings that were abandoned by bankruptcy, buyouts, or offshoring. All three are the unfortunate by-products of dynamic capitalism that Ohioans do not expect to be stopped. However, the value of the structures that are left behind often have negative value, meaning that the value of cleared land is less than the cost of clearing and cleaning the land.

Manufacturing, particularly related to oil refining, steel making, automotive supplies, and paints and chemicals, drove the early Cleveland economy. Today, the regional economy is much more diversified, but the region is still heavily shaped by its industrial heritage. In 1990, manufacturing accounted for nearly 21 percent of Cleveland-area nonfarm jobs and was still the dominant employment sector for the region, even after suffering all of the Rust Belt-era losses of the 1970s and 1980s. As of July 2018, manufacturing accounted for only 11.5 percent of regional jobs and was the fifth-largest employment sector. Clevelandarea minority workers have particularly felt the loss of manufacturing jobs. Manufacturing opportunities and strong union presence had served to make the wage gap between white and black workers in Northeast Ohio narrower than in other parts of the country during the late 1970s, said a Cleveland-based policy researcher.

Employment in education and health services has largely swapped places with manufacturing, rising from 12 percent of all nonfarm jobs in the region in 1990 to approximately 19 percent in 2018. 160 The world-renowned Cleveland Clinic

medical center is the area's largest employer (and Ohio's second-largest).<sup>161</sup> Unlike the manufacturing companies that dominated the employment land-scape in a previous era, healthcare systems today are more deeply anchored institutions. They are not likely to pick up and move operations south or overseas and, hence, will likely continue to be reliable sources of large numbers of jobs. However, as noted earlier, many of these jobs, particularly those projected to be fast-growing, pay relatively low wages. For example, home health aides earned a median annual wage of just \$23,200 in 2017.<sup>162</sup> Even though several of Ohio's hospitals frequently appear on lists of the nation's best for certain specialties, few, with the notable exception of the Cleveland Clinic, attract dollars from outside the state or even region. This growth in low-wage jobs in the nontradable, healthcare industry means that the constituency in Cleveland that cares deeply about trade, while still formidable, has shrunk considerably in comparison to decades earlier.

"Is there anything that will be the mass employer and the gateway to the middle class that manufacturing once was?" said a Cleveland political observer. "I don't see it." 163 The changing composition of the workforce and lower-wage structure may account for more stark divisions on questions of immigration and trade than in Columbus.

A longtime member of Cleveland's Hispanic community said Cleveland was once renowned for being open to immigrants, but he detected a creeping ambivalence toward immigration due to economic insecurity rather than discrimination. "There's just this kind of worry about the pie shrinking instead of figuring out ways to expand the pie," he added. A community leader in Cleveland's African-American community concurred. "I'm all for immigration and the opportunities

"Is there anything that will be the mass employer and the gateway to the middle class that manufacturing once was?" said a Cleveland political observer. "I don't see it." [immigrants] can bring to the region. . . . But as an African American, I would be remiss if I did not [question] why we are not investing in the people who are already here." He stressed lack of adequate funding for education and other services, as well the difficulties encountered by minorities to secure the capital needed to start new businesses. 165

Trade, not immigration, however, still animated most conversations in the Cleveland area because of manufacturing jobs losses. Cleveland is home to a sizable number of people who either directly or indirectly lost jobs due to

foreign competition or who have relatives and neighbors who did. Interviewees therefore made common complaints about China's unfair trading practices, "greedy corporations" that sent jobs to Mexico, and political leaders who negotiated "ill-conceived" trade agreements. 166

Some also scoffed at the notion of working through the system to resolve trade disputes. A former top executive at a global firm with 100-year roots in Northeast Ohio described a threat from a Chinese competitor that was selling a "copy" of one of his company's parts at a price well below the cost of the necessary

raw materials.<sup>167</sup> The Ohio-based company filed a claim with the Federal Trade Commission and won—eventually. By the time the claim was upheld, years had passed and the company had already shut down its division making the disputed part. "We had to lay off our people. We got out of that product almost entirely. All our customers were gone," the retired executive said. He predicted that unless the federal government created faster, more effective enforcement mechanisms, this story would repeat itself.

A Cleveland-area attorney specializing in intellectual property reports that such infringements have been increasing and pose considerable risks to companies. He agrees that Chinese companies have been among those most likely to "realize weaknesses of the system and take advantage of that." The other biggest offenders? Large U.S. corporations. Enforcing intellectual property and patent protections is difficult. "It's both slow and it's expensive." This puts small and midsize firms that lack the resources to fight at a considerable disadvantage.

Other Cleveland-area representatives instead stressed the benefits that have come from trade deals. The Cleveland metropolitan area exported \$8.8 billion worth of products in 2016—second only to Cincinnati's \$26.3 billion. Exports of merchandise accounted for 250,000 jobs statewide; if employment from export activities in the Cleveland region mirrors the region's share of \$50.1 billion in Ohio merchandise exports, then nearly 44,000 Cleveland-area jobs are due to the export of products. In addition to the faster job growth and higher wages associated with export-intensive industries, the increased competition from international trade has benefited the region, state, and nation by leading to more competitive products and more options. The automotive industry offers a prime example of the improvements in choice, cost, and quality. There is no question that worldwide competition has made the industry better, said a Cleveland-area supplier to the automotive industry. The cars that people are driving on the road now are much higher quality; they get much better mileage and emit much less" than years ago.

Those directly benefiting from trade vigorously opposed threatening to "blow up" NAFTA—which was still under renegotiation at the time the interviews were being conducted—regardless of the job and plant losses it may have caused in earlier periods. "It's a twenty-year partnership that most people either think has been useful or they've come to understand and utilize," said a representative of Cleveland-area businesses. "I think the stability of NAFTA may have been its greatest asset." He added that Trump's imposition of tariffs on Canadian steel and aluminum for so-called national security reasons had especially taken by surprise and baffled many of those in Northeast Ohio. He said that few people outside northeastern Ohio appeared to understand how intertwined the supply chain in the Cleveland-area had become with operations in Canada. The Greater Cleveland Partnership—one of the nation's largest metropolitan chambers of commerce, was poised to harness the power of its 10,000 members to influence

talks surrounding changes to NAFTA in the event that negotiations with Canada had taken a turn for the worse. $^{174}$ 

A Cleveland-area policy researcher expressed yet another view that called for fully recognizing the benefits of such free trade agreements but also acknowledging that their gains had been unevenly distributed. The suggested that the nation's "trade dividend" should be reinvested in retraining workers and upgrading infrastructure.

Yet a Cleveland-area head of North American operations for a global corporation based in Europe underscored how infrastructure upgrades would require raising taxes to pay for them. And doing so could undermine efforts to attract or retain business, as investors increasingly look to put their money where the tax and regulatory environments are more favorable to their interests. "Communities don't have a lot of control" over business decisions to stay or go, he said. "It's always about maintaining competitiveness." 176

Cleveland has indeed seen a lot of businesses go, particularly in manufacturing industries paying high wages, with many of those replacing them not paying nearly as well. But Clevelanders still remain united in their support for full integration in the global economy, albeit with some emphasizing the need to enhance competitiveness and others stressing the importance of leveling the playing field and distributing the benefits more broadly.

#### Dayton—Home to an Air Force Base, Strong Union Ties

The Dayton metropolitan area has more than 800,000 residents.<sup>177</sup> Once home to the pioneers of aviation, Orville and Wilbur Wright, the Wright-Patterson Air Force Base is by far the area's largest employer—and Ohio's largest single-site employer—with more than 27,000 military and civilian workers.<sup>178</sup> Through direct and indirect spending, the base accounts for roughly 14 percent of the regional economy. This provides both reassurance and anxiety for local economic developers. The base helps to anchor the local economy, but were it to downsize, the effects would be no less traumatic than when major manufacturing facilities leave town.<sup>179</sup>

From 2000 to 2009, the Dayton metropolitan area lost over 48,000 jobs. Root notably was the 2008 closure of the General Motors Moraine assembly plant, which directly eliminated about 1,100 jobs but also led to the shuttering of several suppliers to the plant. Following those closures, the homegrown technology company, NCR Corporation, relocated to Atlanta in 2009, resulting in the loss of approximately 1,200 jobs. Some losses were offset—for example, in 2014, the Chinese Fuyao Glass Industry Group moved into part of the abandoned General Motors plant, investing roughly \$600 million and creating more than 2,000 jobs—but not by high-paying jobs and with tensions over local workers' efforts to organize.

"What kept us going in the late 2000s was the defense community located in Dayton," said an economic development practitioner charged with helping to support a new generation of innovation and enterprise. "General Motors, Delphi, DHL, we had all that happen at once," she said of the rapid succession of plant closures. "Dayton is a who's who of manufacturing that once was," said another representative of the area's economic development community. "There is very little that takes the place of those large manufacturing employers." Making matters worse was the cascade effect that happens when big employers close or leave town and the supply and logistic network those companies demanded close or leave, too. "It doesn't just affect the incomes of people in the plants," said an area union representative. Closures also affect the incomes of people working in jobs and activities throughout the community. 185

Since 2010, the Wright-Patterson Air Force Base has served as a safety net for a local economy that was spiraling downward after so many manufacturing jobs were lost in the early 2000s. The Air Force estimated that the base contributed \$4.3 billion to the Dayton economy in fiscal year 2014 and employed more than the area's next three-largest employers combined. The Air Force Research Lab and other local organizations have begun partnering on efforts to commercialize technology developed in the lab through startups. "We have this tremendous asset sitting in our back yard," said a Dayton representative involved with the commercialization effort, but much of the innovation and commercial opportunity has remained behind the base's "fence." 187

The base's importance as a community asset extends beyond its immediate impact on the local economy. Its size and activities also make it a magnet for companies that may desire to tap the deep pool of science and research talent or to be near their large customer. Following the nationwide base realignments and closures in 2005, a number of Air Force programs at facilities in other states

were consolidated at Wright-Patterson. This led a number of firms tied to those programs to expand or relocate to Dayton, said an area economic development official.<sup>188</sup>

Although the base is not expected to close or shrink substantially in size anytime soon, there are concerns that the region may have grown too dependent on defense-related spending. In 2015, Wright State University received a \$7 million grant from the Department of Defense's Office of Economic Adjustment to help the region prepare for future

"What kept us going in the late 2000s was the defense community located in Dayton," said an economic development practitioner.

cuts in defense industry employment.<sup>189</sup> The funds will go toward developing regional strategies for technology development and commercialization, marketing, workforce development, and international trade.

In addition to the opportunities it presents for technology transfer and commercialization, the Air Force Research Lab is a central funder of small business development. The lab oversees the Air Force Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) programs, which had a

combined funding of \$407.6 million in 2017.<sup>190</sup> Congress established both programs as a way of fostering innovation among small businesses that serve federal government activities. Although the SBIR/STTR programs fund small businesses in all states, in 2017, Ohio enterprises were second only to California in terms of funds awarded, receiving \$30.3 million.

"We're trying to build an entrepreneur ecosystem," a representative of regional nonprofit support agencies said of the collaborative efforts under way. She added that "it's very slow and takes a long time, but it's coming." Dayton had a legacy of innovation going back to the Wright brothers, but it has been years since the area has been recognized as a hub of innovation. "The biggest challenge in our work has been attitude. What we're doing is culture change more than anything else. Culture change is hard. There's very much a scarcity mentality." 191

That culture change even extends to the unions that have long considered Dayton a stronghold. Representatives of the IUE-CWA—the industrial division of the Communication Workers of America that represents some 150,000 primarily manufacturing workers from its headquarters in Dayton—said that their union has been trying to be a good partner with companies, recognizing that workers, companies, and communities benefit from more products and more efficient processes. The IUE-CWA has become a proponent of Lean/high-performance principles as a strategy for maintaining job security by focusing on ways to lower costs, eliminate waste, and improve quality. The IUE-CWA now offers a free Lean/high-performance workforce program to worksites where its members are employed. Lean manufacturing, according to the IUE-CWA website, is "widely perceived to be the only way—with no guarantees of success—to keep manufacturing jobs in the United States." 193

Representatives of the IUE-CWA... said that their union has been trying to be a good partner with companies, recognizing that workers, companies, and communities benefit from more products and more efficient processes. The past decade's decimation of manufacturing and the associated job losses contributed to a lingering sense of gloom that has been difficult to shake, said both union representatives and members of nonprofit entrepreneurial support organizations. One nonprofit leader described it as a "collective PTSD" that makes it hard to see trade as anything but a "losing proposition for Dayton," even amid signs of economic improvement.<sup>194</sup> In May 2018, the unemployment rate was 4.0 percent, and the total number of jobs in the area had nearly climbed back to where it had been in December 1993, before NAFTA took effect.<sup>195</sup>

But union representatives still find themselves in a difficult position. They continue to advocate for better working

conditions, improved environmental standards, and higher wages and benefits for workers struggling to meet basic household expenses. But they cannot afford to press too hard, knowing that companies, citing the need to remain competitive in the global market place, could follow through on threats to relocate operations to lower-wage areas at home or overseas. Yet, at the same time, corporations fear

losing their competitive edge, corporate profits have soared while the corporate tax burden has fallen, and the worker share of national income has plummeted.<sup>196</sup>

The IUE-CWA representatives interviewed insisted that unions and their members are willing to help their companies compete in the global market-place. But they said that trade deals that have not given organized labor a seat at the bargaining table have failed workers and the American middle class.<sup>197</sup> They argue that one step toward remedying what they see wrong with trade deals would be passage of the End Outsourcing Act, which Ohio's Democratic Senator Sherrod Brown and fellow senators Joe Donnelly of Indiana and Kirsten Gillibrand of New York introduced in early 2017. The legislation would restrict U.S. companies that outsource jobs from receiving federal contracts, claw back tax incentives and bar tax breaks for companies that relocate jobs to foreign countries, and provide incentives for businesses to invest in rural and impoverished American communities.<sup>198</sup>

In addition to passing the End Outsourcing Act, union representatives say Dayton-area workers, as well as workers nationally, would be helped by efforts to:

- Recognize the important work unions are doing on workforce development, and partner with them in developing more apprenticeship opportunities.
- Reform government and public views of unions.
- Encourage a seat for labor at the table of corporate boards, similar to the codetermination system in place in German companies and as proposed by Democratic senators Tammy Baldwin of Wisconsin and Elizabeth Warren of Massachusetts.<sup>199</sup>

Despite the challenges of job loss and the corresponding shock to communities that comes from shuttered storefronts, vacant lots, declining tax bases, and financially strapped schools, Dayton interviewees uniformly expressed optimism that Dayton had better days ahead. One union representative, who had left a job in Colorado six years ago to come to Dayton, remembered the "visceral shock" of seeing the devastation. "My eyes were really opened." Yet, she said, "Among the people here, there's such a grit and dedication to community that I have never seen in other places." Another union representative, who came to Dayton from Cleveland in the 1980s and had experienced being laid off himself, believed Dayton could serve as a model of what can happen when everyone works together and everyone has "a stake." "I was here to see the crash," he said, "and have been blessed to be here to see it being put back together." 201

### Lima—Home to Tank Production Facilities and Nearby Rich Agricultural Areas

Lima is an industrial hub surrounded by agriculturally rich northwestern Ohio. The city's 130-year-old oil refinery dates to Rockefeller's Standard Oil Company.

When British Petroleum acquired and sought to demolish the Standard Oil facility in Ohio, Lima fought back and managed to keep the refinery open.<sup>202</sup> The Canadian integrated company, Husky Energy, currently owns it. Healthcare systems are now among the area's largest employers, but manufacturers of automotive parts and consumer goods continue to be important employers and drivers of the regional economy. Also important to Lima's industrial future is a unique defense facility, the Lima Army Tank Plant.

Similar to Dayton, which lies about 70 miles south, Lima knows well the benefits and costs associated with keeping the nation safe. Since 1941, the Lima Army Tank Plant, formally known as the Joint Systems Manufacturing Center (JSMC), has been building and refurbishing tanks. The expansive complex outside of the city has been a point of civic pride in service to country for seventy years.<sup>203</sup> But the area suffered an emotional scar in early 2005, when twenty-three of the Lima company's 180-member Marine Reserve Unit lost their lives in Iraq.<sup>204</sup> That was a defining experience for a city of just 37,000.

More recently, Lima felt the economic pain and uncertainty of proposed defense-spending cuts. In 2014, employment at the JSMC, a joint venture between the U.S. Department of Defense and General Dynamics Land Systems, fell to roughly 300 workers, and city leaders were reportedly told the facility had been slated to close. The JSMC, sole maker of the Abrams tank, annually pumped more than \$265 million into the regional economy, according to a 2013 assessment of defense department facilities. More than \$53 million was for direct payroll, and the center generated nearly \$2.8 million in state and local taxes in 2012.<sup>205</sup>

What kept the plant afloat, city leaders say, was approval from the Defense Security Cooperation Agency and the U.S. State Department to sell Abrams tanks to ally nations, such as Morocco, Israel, and Saudi Arabia.<sup>206</sup> But the tank plant got a new lease on life when Ohio's two senators, Republican Robert Portman and Democrat Sherrod Brown, worked together to direct more than \$1.2 billion toward modifying and upgrading the Abrams tank and Stryker armored vehicle as part of the Fiscal Year 2017 National Defense Authorization Act. Another \$1.8 billion was included in the fiscal year 2018 Defense Appropriations bill to produce a new version of the Abrams and upgrade the Stryker vehicles.<sup>207</sup>

It is a breathtaking reversal of fortune for the plant, which has been a source of good-paying jobs for the 103,000 people living in the Lima metro area (Allen County) and those beyond the region.<sup>208</sup> The appropriations have already served to double the number of plant workers to 600, and local officials expect employment at the plant to double again to roughly 1,200 workers by 2019.<sup>209</sup>

Lima leaders describe a dramatic uptick in the regional economy. "I've never seen anything like it in twenty-five years," said a local economic development official. <sup>210</sup> He attributed the improvement partly to "a whole different mindset of business. We started seeing hiring and capital investment instead of sitting on cash. We've had a number of large expansion projects."

But that welcomed rush of economic activity now means Lima faces a new challenge: finding workers. "We're sitting on projects that can't fill jobs," the economic development official said of the economic boom. Part of the difficulty in filling jobs, he said, is because workers who lost their jobs in the area took jobs elsewhere. However, he also laid some of the blame at social support services

that were extended to families when jobs were scarce but may be currently serving as a disincentive to work now that jobs are more plentiful.

Citing employer accounts of workers turning down raises and promotion opportunities because wage increases would mean their families would lose access to food stamps, healthcare, childcare, and other services,

"We're sitting on projects that can't fill jobs," the economic development official said of the economic boom.

state and local officials recently rolled out a pilot program to reform the public assistance "benefit cliff." A family of three begins losing benefits when full-time wages exceed \$10.50 an hour, triggering childcare co-payments. Parents lose Medicaid healthcare access when full-time wages for the household passes \$13.68 an hour. Such losses in benefits mean that families may end up less financially stable even though they are earning more. To incentivize families' pursuit of higher wages, the report called for state and local agencies to provide access to a limited amount of funds to help families initially make ends meet.<sup>211</sup> The Allen County program is directed at households where individuals work full time but earn less than \$16 an hour. The program provides access to \$2,500 emergency funding over an eighteen-month period and to a job coach to help program participants achieve financial stability and employment goals.<sup>212</sup>

Lima officials hope the demand for workers will help draw people back to the region, but they recognize that they face strong competition for talent, particularly in the counties of the Columbus 2020 economic development region to its southeast. Although Lima can tout its lower cost of living, one local official points out that it is hard to compete for housing development with Columbus. Little investment has been made in new housing development in Lima because the return on such projects is significantly greater in Columbus, which can demand higher prices and rents.<sup>213</sup>

As Lima officials grapple with attracting the workers needed to meet growing demands, some worry that federal-level actions may threaten a pillar of the local economy—agricultural activities. "NAFTA has been extremely good for our company," said a Lima-area food processor, citing talk of rewriting it and other trade pacts. 214 "Before NAFTA, we had a 20 percent tariff on our product. Today we have zero." He does not support tariffs that would make his pork snacks more expensive for Mexican consumers and less competitive with other snack options.

Mexico is the top export market for the company's food products, although they are exported to thirty countries, particularly within Central America and northern South America. "It's a great business for us down there and has created significant business for us in Ohio." The 63-year-old company employs 200

workers at its homegrown headquarters in Allen County and another 250 in five facilities around the country and two plants in Mexico and Brazil.<sup>215</sup>

But tariffs on finished products are not his only concern. He also worries about the impact of an escalating trade dispute on the raw material he needs to produce his pork snacks. In April 2018, in response to U.S. tariffs on Chinese steel and aluminum imports, China imposed an additional 25 percent tariff on pork imported from the United States. In July, China levied another 25 percent tariff on pork. Since 2011, China has been the third-largest export market for U.S. pork and pork products.<sup>216</sup> Mexico, which is by far the largest consumer of U.S. pork and pork products, accounting for 33 percent of exports by volume, levied its own 20 percent retaliatory tariff on pork in June.<sup>217</sup>

Signs of lower demand for U.S. pork in China are already being seen as a result of the more than 70 percent total tax on U.S. imports and an increase in Chinese production. Although lower demand would be expected to yield lower prices for the pork he needs for his products, the Lima-area food processor worries about what a glut of U.S. pork might mean for his business down the road. His concern is that farmers and processors without the means to withstand the sudden shift in pricing power would be driven out of business, eliminating capacity to meet demand after the trade tariff tit-for-tat disruptions in market equilibrium subsided. We would much rather have stability than a short-term downturn in cost of raw material, he said. We want stability. We don't want a roller coaster ride."

He predicts that the tariffs levied by China and Mexico will be particularly hard on small farmers who do not have the financial resources to ride out the trade dispute. He acknowledges that many of his fellow Trump voters support the administration's focus on trade—and he even agrees that trade agreements with China have been uneven and unfair—but addressing that imbalance "needs to be

handled in a way that doesn't beat up certain industries."

A representative of Lima-area businesses agreed. He wishes, instead, that efforts to curb potentially unfair Chinese practices would be better targeted, such as on infringements on U.S. companies' intellectual property, instead of the current broad-based imposition of tariffs. 220 "My concern is Canada and Mexico," he said. "We do a lot of trade with those two countries." In addition, Canadianowned enterprises and other foreign-owned subsidiaries

employ hundreds of local workers. The Canadian-owned Husky Energy refinery in Lima is undertaking a multimillion-dollar upgrade, which, over the next two years, is expected to add 1,000 construction workers to the facility's 400 full-time employees.<sup>221</sup>

The Lima-area food processor said he is "confident that getting into trade wars is not going to help [U.S. businesses and workers overall]."<sup>222</sup> Nor is anti-immigrant rhetoric. "If we don't allow immigrants to come into the country at a significant pace, we will go from population growth to population decline."

"I would much rather have stability than a short-term downturn in cost" of raw material, he said. "We want stability. We don't want a roller coaster ride." Population growth, he said, is central to economic growth. "Italy and Japan don't have population growth, and it has affected their economies." While understanding concerns about immigrants potentially taking good-paying jobs from American workers, he sees a different threat if businesses cannot find suitable workers: quicker adoption of automation. He cited reports of European businesses increasingly turning to automation in response to tight labor markets.<sup>223</sup>

#### Marion—A City Seeking to Reinvent Itself

Marion, with a population of 36,000, lies about one hour's drive north of Columbus. Marion's economy was once powered by the Marion Steam Shovel (later Marion Power Shovel), which provided the machines that dug the Panama Canal and moved the rockets that sent astronauts to the moon.<sup>224</sup> But the company, which once had employed as many as 2,500 workers, was sold in 1977, and the facility finally closed in the late 1990s.<sup>225</sup> Marion has been working to revitalize its economy in the years since.<sup>226</sup>

A combination of private and public investment is helping Marion reinvent itself by focusing on its considerable assets: its location along three rail lines and its proximity to Honda's complex that includes an automotive test track, a research and development facility, and two assembly plants. Marion is also home to a 2,400-worker Whirlpool facility, touted locally as the world's largest clothes-dryer plant.<sup>227</sup> Although the plant dwarfs all other industrial activities in terms of employment, Marion continues to be a manufacturing area with an attractive pool of talent. It is home to two steel plants. The North Carolina-based Nucor Corporation acquired the Marion Steel Company in 2005 to produce rebar. ArcelorMittal Marion, part of the Luxembourg-based world's-largest steel producer, welds and processes precision mechanical tubing.<sup>228</sup>

Longtime residents of Marion remember it as a booming industrial center. People from surrounding areas commuted to the city to work at Marion Steam Shovel and the businesses that supported it. Because the company was locally owned and headquartered in Marion, it employed mid-level managers, accountants, and associated professionals, in addition to assembly-line workers. Advertisers supporting Marion Steam Shovel also moved into the area, spawning another area of specialty. "We were the Madison Avenue of the Midwest," recalled a local business owner.<sup>229</sup>

The purchase by "outsiders" of Marion Power Shovel in the late 1970s represented the first salvo in the real war that many Marion residents argued needed to be waged—not directed against free trade, per se, but against the loss of local ownership and control. As big corporations bought out local businesses, the economic bottom line increasingly governed business decisions that did not prioritize the needs of communities and families. Large corporations can more easily move operations around the country and world to gain from advantageous wage differentials, production capacity, tax environments, and even government

incentives. The acquisition of smaller local businesses by larger nonlocal ones also increased the distance between owners and executives on the one hand and rank-and-file employees on the other. Historically, company executives and line workers used to be part of the same community. No longer. One consultant advising on the redevelopment efforts of Marion's lower downtown concurred.<sup>230</sup> He tried to contrast what once was with the present day, citing the dozens of places to eat in and around Marion as an example. "But how many of them are locally owned?" he challenged. "Not one."

Even as a powerful sense of loss hangs over the area, those interviewed stressed that they are not looking to turn back the clock.<sup>231</sup> They understand that times have changed—that big businesses have become the new reality and they need to innovate and automate to compete effectively in the global economy. Likewise, Marion needs to innovate and reinvent itself. They regret that, in retrospect, many in the area came to this realization too late, but most are there now. "It was almost a relief when [the last parts warehouse connected to Marion Power Shovel] finally closed," said one Marion official. "Let's get our heads out of the 1950s. In some ways, it's nice to have a funeral and move on."

Marion has benefited from an entrepreneur frequently drawn to the area because he sees asset and investment potential in abandoned industrial properties. He has been able to repurpose long-vacant buildings and capitalize on the area's logistical advantages, creating an industrial park and intermodal yard that supports the efficient distribution of products ranging from diapers and laundry detergent to Mexican beer. He and other economic developers explain that Marion has also been able to leverage its strategic location along three rail lines

to lure new employers to the area, particularly suppliers to Honda's facilities just 30 miles away.<sup>232</sup>

Another local real estate developer has been transforming the abandoned department store and office buildings in downtown Marion into residential loft apartments. She is hoping these lofts will help attract young entrepreneurs to Marion as they get priced out of Columbus. She and her colleagues are looking to revitalize lower downtown Marion and recognize that urban dwellings, local restaurants, and coffee shops are needed to attract investment dollars.

Marion has recently been logging some important investment wins. In 2017, Nucor announced plans to invest \$85 million in modernizing its facility; and POET, a biofuel company based in South Dakota, said it would invest \$120 million in its bioethanol facility in Marion.<sup>233</sup> The Union Tank Car Company selected the city as a site for a second facility to re-clad 70,000 rail tankers to comply with new federal safety guidelines. A selling point was the city's legacy—the vacant, hulking Marion Power Shovel site. The site's structure allows Union Tank to set up large cranes inside the building to lift the tank cars for rehabbing. "There are only a few buildings in the country where that can happen," said a longtime economic development professional.<sup>234</sup>

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Some longtime, locally owned businesses are also benefiting from refurbishing operations. A seventh-generation, family-owned padlock business, for example, has found high-value specialization and aggressive automation to be a winning combination for global competition. The company's president said, "[for much of the company's existence], all we did was assemble product. We had no competition. But then the world changed. All of a sudden, locks were being made in China and Mexico."235 The three dozen or so American-made lock companies consolidated into a half-dozen, and some moved operations outside the country. "To be competitive we have had to move to automation," he said, but quickly added that he had never let any of his employees go as a result of automation, displaying the care for his workers that community members say is absent when local companies get bought by companies in other parts of the country or world. The Marion lockmaker has committed to using only U.S.-made products, but he admits he gets pressure from board members to source from overseas. "But I believe in our country and in building relationships and building places where people can have a fighting chance," he said. Today, the Marion company's specialized, high-security locks are used in pipelines, mines, and refineries across the country and worldwide.

Interviewees in Marion conveyed a simple message: we will do what we can to reinvent ourselves and look to the future—just let us have a fighting chance. They stressed that they embrace free trade and see it as vital to the city's economic well-being. A number of local residents also emphasized that they do not see legal immigrants as a threat. "They are taking jobs in the big cities for which we're not qualified or lower-paying jobs in retail and on the farms that we do not want," said one local business owner.<sup>236</sup>

Marion interviewees stress that they are not looking to assign blame but are up against long odds. Today, the per capita income in Marion County is \$33,688 per year, roughly two-thirds of the national average; and 22 percent of Marion's inner-city residents live below the poverty line.<sup>237</sup> As of 2016, only about 12 percent of workers in Marion have a bachelor's degree or higher—well below the national average of about 30 percent. And outmigration from Marion County continues apace. Its population shrunk by 2.3 percent from 2010 to 2017.<sup>238</sup>

#### Coshocton—A City Counting on a New Economic Lifeline

Like in Marion, interviewees in Coshocton also want a fighting chance and what that would entail is similar. But they may be fighting even longer odds, and their economic fate is particularly intertwined with evolutions in the energy sector.

Coshocton, part of Ohio's Appalachian region, lies little more than one hour's drive east of Columbus. With a population of around 11,000, Coshocton is the smallest city of the study group.<sup>239</sup> Coshocton sits atop the Utica Shale formation but lies one county away from the activities associated with the Marcellus Shale natural gas reserves. Coshocton was once a thriving industrial center embedded within a rural county, but the General Electric laminate plant, the rubber floor

mat supplier to the automotive industry, the paper mill, and the rubber glove factory are gone. Today, Coshocton's largest employment activities are related to coal, steel, and food processing.

Coshocton's biggest concern is the steady departure of its locally owned companies, with many leaving in just the past several years. In 2007, Lancaster Colony, a Columbus-based holding company, sold off the Coshocton-based Pretty Products automotive floor mat company to focus on its line of glassware, candles, and specialty foods; and the new Michigan-based owner moved Pretty Products production to Tennessee.<sup>240</sup> In 2011, the homegrown industrial and medical glove factory, Edmont-Wilson, which the Australian-owned Ansell company had bought years earlier, closed the Coshocton plant and moved production to plants in Mexico and Sri Lanka.<sup>241</sup>

Perhaps the biggest blow came in 2015, when the community was shocked by the rapid shutdown of its corrugated box plant, a 150-year-old enterprise that was one of the area's biggest and best-paying employers. Just a few years before its closure, the plant had been part of a series of mergers and acquisitions negotiated to increase market share in the global paper commodity market. In July 2015, WestRock emerged as one of the world's largest paper companies with \$15 billion in revenues and 275 plants in thirty countries.<sup>242</sup> Four months later, it shuttered the Coshocton plant in a move to reduce capacity and rebalance markets.<sup>243</sup>

Many in Coshocton have a personal story of job loss. One woman recalled how her husband lost his job as a boiler operator at WestRock when the paper mill closed.<sup>244</sup> Years earlier, he had lost his job at Pretty Products when it relocated and at AK Steel as a part of the layoffs during the recession. When she was younger, she also watched her parents cope with her father's job loss when General Electric's Coshocton plant closed. After the recent mill closure, her husband was lucky enough to find new employment nearby, but the new position pays far less than his paper mill job, costing the family some \$35,000 in annual

Coshocton's biggest concern is the steady departure of its locally owned companies, with many leaving in just the past several years.

income. "We took a considerable hit, as did the other 200 families" affected by the mill closure. She now warns her two teenagers that they have to always be prepared for job losses and financial disruptions. "It has taken years for people to rebound," she said. "The community really banded together to try to help those hurt. We and the others affected received a lot of support from our community in those dark days."

The paper mill closure not only idled more than 200 workers, it left the community awash in excess water capacity due to the plant's intense need for water. Households experienced a 38 percent increase in their water bills required to offset the revenue lost from 3 million gallons of water that is no longer consumed by the now-shuttered paper mill.<sup>245</sup>

Aside from the loss of jobs and tax revenues, the mill had also long been an active community partner, supporting local organizations and leading fundraising

efforts for the United Way and other charitable activities. The plant's closure produced a "big ripple effect" that is still being felt, local officials said.<sup>246</sup> Loss of local ownership or even plant management with roots in the community further erodes the pool of civic leaders who traditionally would have been assets to turn to in difficult times. "These [outside] companies [that bought up once homegrown firms] are not interested in serving the community. They just want to take the money. I worked for one of those," said a manager who now works for a locally owned firm.

This firm, a family-owned metals parts manufacturer, found it needed to reform its business when it faced competition from cheaper Chinese products. It invested \$1.5 million in state-of-the-art machinery from Switzerland, nearly got out of the lighting industry it had long served because it could not compete on price, sought more contracts with suppliers to the defense industry, and leveraged its expertise in hydroforming irregularly shaped specialty products for the aerospace, medical, and power generation industries. <sup>247</sup> The nearly 100-year-old company is succeeding well enough to continue its long tradition of giving back to its community. <sup>248</sup> It particularly feels the responsibility of that role as the number of locally owned businesses shrinks.

However, there are simply not enough of these success stories in the Coshocton area. From December 2007 to December 2017, Coshocton County lost approximately 17 percent of its employment.<sup>249</sup> Per capita income is below Marion's at \$32,939 and is just two-thirds of the national average.<sup>250</sup> As in Marion, only about 12 percent of workers in Coshocton have a bachelor's degree or higher.<sup>251</sup>

Despite the spate of job losses over the years, area officials say Coshocton lacks the skilled workers necessary to fill technical jobs involving increasingly sophisticated machinery. Area employers say they have difficulty filling the 100 jobs that are open every day despite an unemployment rate that is still relatively high. "We realize we have a gap in our skilled labor," said a Coshocton official who focuses on workforce issues. <sup>252</sup> She said the area recently received a \$285,000 grant for a multi-organizational collaboration to offer adult workers training in industrial maintenance. Education is an area in which Coshocton leaders know they need to improve. But well-educated workers tend to be mobile, willing to relocate in search of better job opportunities. This threatens to deplete a resource the area sorely needs to refresh its economy. "We're trying to figure out how to entice our young people back," she said.

In such circumstances, the people of Coshocton are extremely dependent on the industries they still have in the area—steel and coal among them. They recognize that the steel tariffs are costly for some of their locally owned businesses, such as the metal parts manufacturing firm, which is now having to pay more for key inputs. Yet, as discussed earlier, tariffs may benefit other local operations, such as the AK Steel's Coshocton Works, one of the nation's top producers of flat-rolled stainless steel. Those interviewed in Coshocton shared a hope that, perhaps over the longer term, tariffs would disincentivize firms from outsourcing

overseas and incentivize them to place production in the United States to climb over the tariff wall. "Something had to be done." Other countries "don't pay people the kind of wages we do here," said one Coshocton representative who pointed out the "double standard" of other countries imposing tariffs on U.S. products but complaining about the United States taking similar steps.<sup>253</sup> "We're kind of a society that has done this to ourselves."

But just as the steel tariffs could be a double-edged sword for Coshocton, the same is true for workers both benefiting and losing out as a result of transitions now unfolding in the energy sector. The shale gas boom in neighboring counties has been described as a "game-changer for U.S. manufacturing," and Coshocton County officials are hoping that a \$7.5 billion proposed petrochemical plant in nearby Belmont County will have downstream benefits for them. 254 Companies from Thailand and South Korea may partner in developing this "cracker" plant, which would take ethane, a by-product of natural gas production, and turn it into ethylene, a necessary ingredient for making plastics and chemicals. The project would employ up to 6,000 construction workers and hundreds of full-time employees once it becomes operational. 255 It also could draw companies in the plastics and chemicals industries to the surrounding area.

Yet, the plentiful natural gas supply that makes such an investment possible has also served to undercut the profitability of coal production and coal-fired power generation—both of which have been important contributors to Coshocton's economy. Several interviewees said that the Conesville Power Plant is expected to cease operations in 2021, eliminating more than 200 well-paying jobs. <sup>256</sup> Conversion of the coal-fired plant to natural gas, if feasible, would not be expected to employ nearly as many workers as those needed for coal-fired production. Despite its proximity to energy stores, Coshocton lacks a natural gas pipeline. Coshocton also lacks infrastructure improvements, such as four-lane highway access, to attract businesses drawn to the area to take advantage of plentiful energy. Internet access is another challenge, as it is for many remote, rural communities. <sup>257</sup>

Local officials recognize the issues they face and are working hard to address them, an area's economic development official said.<sup>258</sup> But they seek partners in this mission at the regional, state, and federal levels. "We need help. We can't do this by ourselves." Yet, what is also clear is the personal commitment to community. "I was born and raised here. I see the potential we have. I know we can rebound," the official said of her zeal in promoting Coshocton. "We do have a lot of people who went through a horrible time [of job loss], but they still feel blessed. They still think this is a great community and a great place to live."

The struggles and viability of the Coshocton local community is what preoccupied their people most. Under the circumstances, it is understandable why they, in particular, might question if the United States should continue spending billions of dollars on what some referred to as "seventeen years of nation-building" in Afghanistan.<sup>259</sup>

#### **Concluding Thoughts**

There are a multitude of perspectives on how U.S. foreign policy impacts the economy and working families. And this explains, in large measure, why policymakers have defined the economic objectives they seek to advance through foreign policy in very broad terms that could be applicable for all. But as the above narratives illustrate, an approach that relies on broad principles will invariably benefit various constituencies but lead to painful dislocations for others. Backlashes against trade policy are therefore not surprising in areas where domestic investments have not been made to adequately address the dislocations.

As can be seen in the case of Ohio, and across its communities, the rising tide of economic growth has washed over the state but not lifted all boats. The reality on the ground revealed in the profiles of six Ohio communities suggests a need to explore how domestic and foreign policy can adapt to invest in people through place. This is especially important for communities that contend with the by-products of an increasingly globalizing economy in the form of abandoned factories and power plants that have become economic millstones.

To be sure, some of Ohio's communities, such as Columbus, are thriving, and others are making progress in revitalizing their economies and growing opportunities for good-paying jobs. Those communities worry about rash changes to a status quo economic and policy environment that could threaten their wellbeing. Other communities are struggling in an economic and policy environment that they see as stacked against them and dismissive of their needs. What they ask for are policies, both foreign and domestic, that afford them a fighting chance. As they explained, a fighting chance means:

- Not adopting more free trade agreements that force American workers to compete with those in other countries earning very low wages.
- Taking a tough line against those who do not play by the rules in the global economy, particularly China.
- Not forcing local firms to compete with companies that have the size and clout to wrest special treatment from U.S. federal and state governments or that have received financial support and protection from other countries.
- Not incentivizing externally owned companies, as they relocate overseas, to leave local communities to deal with decaying buildings and infrastructure.

The challenge policymakers face is to provide communities and workers with this fighting chance, while preserving the benefits of America's global trade and engagement that enable many others to prosper. At heart, this means moving beyond debates simply about trade and facing the hard trade-offs inherent in any course of action they must consider.

TABLE 9

Interviews Conducted in Areas With Divergent Economic Realities and Viewpoints<sup>260</sup>

			POLITAN CAL AREAS		MICROPOLITAN STATISTICAL AREAS		
	Columbus	Cleveland	Dayton	Lima	Marion	Coshocton	Ohio
Population 2017	2,078,725	2,058,844	803,416	103,198	64,967	36,544	11,658,609
Population Growth 2010-2017	9.0%	-0.8%	0.5%	-3.0%	-2.2%	-1.1%	1.0%
Foreign-born Population 2012-2016	7.3%	5.6%	4.1%	1.2%	1.4%	0.6%	4.2%
Per Capita Income 2016	\$47,725	\$48,968	\$43,671	\$38,872	\$33,688	\$32,939	\$44,561
Median Home Value 2012-2016	\$161,700	\$140,200	\$122,900	\$107,500	\$93,400	\$97,100	\$131,900
Major Nonfarm Employers	The Ohio State University Government (federal, state) OhioHealth JP Morgan Chase & Co. Nationwide Insurance	Cleveland Clinic University Hospitals Progressive Insurance Giant Eagle, Inc. Government (federal, state)	Wright-Patter- son Air Force Base Premier Health Kettering Health Network Kroger Co. Government (county)	St. Rita's Medical Center Lima Building & Construction Trades Council Lima Memorial Health System MetoKote Corp. Ford Motor Lima Army Tank Plant	Whirlpool OhioHealth Marion General Hospital Marion City Schools Anderson Windows	McWane Ductile Kraft Heinz Co. Oxford Mining AK Steel Government (county)	Walmart Cleveland Clinic Foundation Kroger Co. The Ohio State University Mercy Health
Manufacturing Workforce, July 2018*	6.7%	11.5%	11.3%	15.7%	25.0%	26.2%	12.4%
Key Themes Expressed in Interviews:	Looking to capitalize on its diversified economy	Increasingly diversifying and becoming less reliant on	Counting on the Air Force Base to help reinvigorate	Benefiting from defense spending to combat recent	Hoping to reinvent itself after local businesses left	Recovering slowly from plant closures	
Economic Outlook, Trade, Foreign Direct Investment, and Defense	and attract investors  Worried that unpredictable trade and immigration policies could be a strategic risk for investors	manufacturing  Continuing dependence on trade relations with North America and China but with varied opinions on trade policy  Uncertain about economic growth and demographic trends	the economy; the base was a source of stability during the recent manufacturing job losses Working to retain historically strong union influence	job losses  Seeking workers with the appro- priate skills to fill job demand  Desiring trade stability to support its large agricultural sector	and companies moved jobs overseas  Working to at- tract new inves- tors via its appeal as a strong manufacturing location	Seeking new businesses and invest- ments, specifically in the energy and manufac- turing sectors, and the skills to fill the jobs	

**SOURCES:** U.S. Census Bureau (population, population growth, median home value, foreign-born population), U.S. Bureau of Economic Analysis (per capita income), and Ohio Development Services Agency (manufacturing employment). See endnote for sources on major nonfarm employers.

**NOTE:** Marion and Coshocton are micropolitan statistical areas—the boundaries for which are the counties of Marion and Coshocton. The metropolitan statistical area Lima consists of a single county (Allen). See: Ohio Development Services Agency, "Metropolitan, Micropolitan, and Combined Statistical Areas," April 2013, https://development.ohio.gov/files/research/P3005.pdf. The major nonfarm employer information was gathered for the Marion, Coshocton, and Allen counties.

<sup>\*</sup> The manufacturing workforce for metropolitan areas and Ohio is calculated as a share of total nonfarm employment for July 2018, not seasonally adjusted. The manufacturing workforce for Marion and Coshocton is calculated using preliminary countywide March 2018 employment data, as data is unavailable for July 2018. The numbers for Marion and Coshocton may be underestimated, as they are calculated as a share of total employment rather than total nonfarm employment.

#### CHAPTER 5

# PRELIMINARY CONCLUSIONS AND NEXT STEPS

While parts of Ohio's economy are thriving and business confidence is soaring, many middle-income households still struggle to meet their household expenses, invest in their children's future, and save for retirement. These households now feel more exposed to the cyclical ups and downs of the economy. And many smaller cities and towns are still trying to reinvent their economic bases following the departure of major local employers.

The challenges these households and communities face are not merely an Ohio phenomenon but, in many instances, indicative of national trends. There is room for strategic improvements and a strong case for change. Policymakers must expand their efforts and explore how U.S. foreign policy could advance—in hand with domestic policy—more Americans' economic interests.

But there is no silver bullet; merely renegotiating previous trade deals or spending less abroad will not have the desired effect. Improving the economic livelihood of America's middle class will require working through difficult trade-offs and devising a comprehensive strategy. Five sets of policy directions and questions emerged from the Ohio study and offer a good starting point:

**Clarify the national economic interests:** How should national economic interests (to be advanced through foreign policy) be defined? To what extent are those interests undercut when the benefits from economic growth concentrate more in upper-income brackets and specific geographic locations—and meanwhile, an increasing number of workers and places struggle to sustain a middle-class standard of living?

**Link trade to a comprehensive national economic strategy:** How can we ensure that the trade agenda is developed in tandem with a comprehensive economic strategy to enhance competitiveness and help workers and communities adapt to structural changes in the global economy?

**Develop a national strategy for foreign direct investment:** What more must be done at a national level, through public and private efforts, to make the United States even more competitive in the global market to attract and retain FDI while discouraging "a race to the bottom" between U.S. cities and states to win deals?

**Highlight the economic trade-offs around defense spending:** How can the debates on the defense budget more clearly acknowledge the livelihoods of working families and entire communities it sustains, the health of the global economy it promotes, and the resources for pressing domestic investment it depletes and diverts?

**Define the U.S. global leadership role and its economic implications:** As the need for domestic investments at home increases and the nature of international competition and cooperation evolve, especially with China, what should U.S. global leadership entail, what will it cost, and how will American working families benefit from it economically?

These five policy directions and questions are deliberately general and provocative. It would be premature, on the basis of a limited set of interviews in only one state, to offer more expansive and detailed recommendations. After receiving feedback on this case study, conducting additional ones in other states, and further exploring the emerging themes, it will possible to elaborate on and eventually provide answers to these questions.

#### Clarify the National Economic Interests

All U.S. presidents make clear that their foreign policies seek to advance America's national economic interests, in addition to keeping the country safe and defending its way of life. But the definition of those interests is no longer obvious as the economic fortunes of Americans and their communities—both across and within states—have increasingly diverged. A common assumption is that the economic interests of states in the industrial Midwest may conflict with those on the coasts and elsewhere in the country. The situation is actually far more complicated than that.

Major differences persist across middle-income populations within Ohio itself. As is true for most U.S. states, there are many different "Ohios." Some people and places are thriving and others are struggling. The economic future

Communities that have lost major sources of employment due to outsourcing, offshoring, or foreign import competition have not been able to seamlessly or quickly reinvent their economic bases.

looks bright for those with a bachelor's or advanced degree in Columbus, Ohio, but is far more precarious for those without one in Coshocton and other smaller cities and towns that lie outside of the state's stronger metropolitan economies.

Ohio's economy has grown, hundreds of thousands of new private sector jobs have been created, and business and consumer confidence has soared. Yet many of the state's fastest-growing occupations do not pay enough to sustain a modest middle-class standard of living.

Communities that have lost major sources of employment due to outsourcing, offshoring, or foreign import competition have not been able to seamlessly or quickly reinvent their economic bases. Manufacturing once provided a decent

wage for workers without college degrees, but now it accounts for only 13 percent of Ohio's workforce.<sup>261</sup> Meanwhile, twice as many people now work at Walmart—the top employer in Ohio and twenty-one other U.S. states—than are directly employed in the steel and iron industries.<sup>262</sup> There is an effort to preserve and grow the ranks of good-paying manufacturing jobs for blue-collar workers who remain—to the extent possible given increasing automation. But this does not address the concerns of the majority of Ohio's workforce who do not hold a bachelor's degree or possess other technical skills valued by the state's private employers.

These realities raise real questions about the desirability of defining national economic interests in terms that rely solely on net aggregate benefits for the nation without adequately considering distributional aspects. However, the alternative—of prioritizing the revival of struggling workers, industries, and communities—runs the risk of underinvesting in or undermining the prospering parts of the economy. These realities and dilemmas require current and future administrations to clearly define the national economic interests that they intend to advance through U.S. foreign policy. Every relevant strategy document, including the National Security Strategy, should explicitly answer this question: Whose interests are being served, and who may lose out? It is time to directly acknowledge the specific trade-offs inherent in any course of action.

# Link Trade to a Comprehensive National Economic Strategy

Virtually all of the study's interviewees assumed that trade policy was the aspect of U.S. foreign policy having the most impact on the economic well-being of America's middle class and their communities. None interviewed, including in areas strongly favoring Trump in the last presidential election, argued solely for protectionism. They stressed the importance of Ohio being fully engaged internationally and trading freely in an open, integrated global economy. This was seen as vital for creating jobs, attracting investment, and making goods and services more affordable for American consumers. Ohio's exporters welcomed the emergence of new and prospering markets overseas, believing that they could not grow their businesses through supplying the U.S. market alone.

That said, while they strongly support free trade, they insist on a level playing field. They called for adjustments to how the United States approaches the negotiation and enforcement of trade agreements. Labor representatives, displaced workers, and others in struggling manufacturing towns pushed for higher labor standards in free trade agreements with low-wage countries, so that U.S. workers could more fairly compete.<sup>263</sup> Many of those interviewed, in both big cities and small towns, also criticized previous administrations for not pushing back harder against unfair foreign trading practices, especially objectionable actions by China. Some specifically highlighted deep concerns about China's subsidies

to state-owned enterprises, theft of intellectual property, and prior currency manipulation.

At the same time, the term "trade" was often used liberally in interviews, suggesting it has become a proxy for anxieties confronting middle-income households that go well beyond trade. It speaks to a wider set of challenges arising from a changing, increasingly interconnected global economy. Those interviewed attributed the challenges families across Ohio's small and mid-sized cities and towns face to many different factors that may intersect with trade policy but go well beyond it. These include:

- Workforce transformations due to automation and other technological advances.
- Fierce competition among U.S. states for domestic and foreign business investment.
- Declining union participation that has diminished workers' collective bargaining power, but also union inflexibility at key moments that inhibited business investment.
- Transition toward a more services-oriented economy with lower wages for low- and semi-skilled work.
- Increasing difficulty of sustaining a middle-class standard of living and saving for retirement on current wages, as the costs of healthcare, childcare, and education rise.
- Anxieties surrounding perceptions that—even as business confidence and economic growth rates rise—the benefits of growth are disproportionately going to corporate shareholders and executives and that another harsh downturn in the business cycle is inevitable at some point.
- Loss of local ownership and diminished local engagement as corporations buy out small and medium-sized businesses and move their headquarters elsewhere.
- Capital flight out of the United States and from certain U.S. regions.
- Prohibitive costs for cities and towns to clear or repurpose abandoned plants and associated buildings due to bankruptcy, buyouts, or offshoring.
- Underinvestment in areas that could boost productivity growth for small businesses, workers, and communities—such as infrastructure, research and development, education, and transportation—in a time of skyrocketing national debt.
- Breakdown in the de facto social contract among government, business, labor, and communities.

Clearly, these challenges cannot be addressed merely through the modernization, renegotiation, or tougher enforcement of trade agreements, even if such changes are needed in their own right. Overcoming these challenges requires making the domestic investments needed to help workers and places struggling to keep up in a changing global economy. It requires confronting aspects of international economic policy that influence global capital flows, such as international tax policy and tax havens. It requires accepting the linkage between international trade policy and the often sensitive and difficult debates on domestic, fiscal, and social policies. And, therefore, it necessitates breaking down bureaucratic barriers in government to ensure that those addressing domestic and foreign issues are working together.

Previous Democratic and Republican administrations, including those in which this study's task force members have served, pursued trade-liberalizing agreements without adequately considering, foreseeing, and preparing for the domestic consequences. The current administration risks making the same mistake, as it pursues significant adjustments to existing trade arrangements. It further risks adopting policies that isolate the United States from the benefits of the global economy.

### **Develop a National Strategy for Foreign Domestic Investment**

All those interviewed in Ohio appeared to agree that government, business, and local communities should work together to attract more FDI. Such foreign investment is seen as a necessary complement to domestic investment for creating good-paying jobs and generating critical revenue for the state. Ohio has forged strong public-private partnerships to globally market the state's comparative advantages and targeted industries.

State officials and economic developers stress that Ohio's private and public sector actors are best-placed to lead this effort. They welcome modest national-

level programs, such as SelectUSA, to supplement or complement their efforts. But they do not depend on them. Nor are they looking for U.S. government officials at the U.S. Department of Commerce or embassies abroad to take charge. Federal-level workers cannot make the case for Ohio nearly as persuasively as Ohioans can. Nor should they, as it could mean prejudicing the efforts of some U.S.

There are ways for a wellresourced federal agency to support U.S. states in attracting FDI without playing favorites.

states over others competing for the same investment dollars. Moreover, state officials and economic developers in Ohio would not welcome anything that might be, or be perceived as, an added layer of bureaucracy from Washington, DC, that could impinge on their flexibility and autonomy.

Yet there are ways for a well-resourced federal agency to support U.S. states in attracting FDI without playing favorites. For example, state officials are

ill-equipped to help potential foreign investors navigate the maze of federal regulatory requirements, ranging from work visas to taxes. Government agencies could help states market themselves more broadly and work with investors to resolve challenges after an investment decision has been made.

Worldwide, the United States remains the largest recipient of direct investment, but other countries are steadily gaining ground, in part, because they have employed aggressive national strategies to compete with the United States to draw foreign investment.<sup>264</sup> U.S. policymakers need to develop one as well.

There is some risk that the benefits to working families of FDI will steadily diminish as competing U.S. states undercut one another on local taxes, regulations, wages, and direct financial incentives. This, in some respects, is where modern trade policy and FDI intersect. By negotiating trade pacts that force both U.S. states and foreign trade partners to bind themselves to higher labor and environmental standards, for instance, the federal government can help avoid a race to the bottom.

More broadly, a national commitment to boosting FDI would create a new context for discussions on such issues as stability in trade policy, immigration, the regulatory environment, corporate tax rates, public and private investments in infrastructure, and transportation and workforce development.

# Highlight the Economic Trade-Offs Around Defense Spending

The international affairs budget (the "150 account")—which pays for U.S. diplomatic and development activities and covers U.S. contributions to international organizations—is often in the crosshairs when unfunded needs at home put pressure on cutting back abroad. But this budget accounts for less than 1 percent of the overall federal budget. It must, of course, be spent wisely and deliver a clear return for the American people. Yet it needs to be put in perspective. Defense spending, which topped \$700 billion for fiscal year 2018, constitutes 17 percent of the federal budget, according to the Congressional Budget Office. <sup>265</sup>

Therefore, a serious discussion about cutting spending abroad to meet the needs at home must first and foremost concentrate on defense spending. The terms of that debate will need to be clarified, however. At least four different perspectives on defense spending came up during the study interviews. And views on defense spending vary, depending on the perspective. First, there is strong support for spending what is required to keep the country safe from numerous national security threats. However, few have a basis to know whether current amounts dedicated to that objective are adequate or inflated.

Second, there is general aversion to unwise and unfunded wars, with many now putting the decades-long military interventions in Afghanistan and Iraq in that category. Third, while the actual amount the United States spends on guaranteeing allies' security is undefined—and it is potentially less than commonly

perceived—there are mixed views about whether this arrangement is fair for Americans. The views appear to partly stem from various notions about the nature, costs, and benefits of U.S. global leadership in general, as discussed in the next section.

Finally, there is strong support for sustaining or increasing defense spending that provides an economic lifeline for working families and communities. For example, if the Wright-Patterson Air Force Base—Ohio's largest single-site employer—were to close, the Dayton area would be devastated. Similarly, if tank production for the U.S. Army were substantially reduced or halted, Lima would suffer greatly. The big cities, too, could be affected by significant cuts to defense spending. The east side of Columbus is anchored by the Defense Supply Center, one of three such centers in the nation. <sup>266</sup> The Defense Finance and Accounting Service employs 2,250 people in Cleveland and has a similar facil-

Use of the defense budget for domestic economic benefits deserves to be the subject of a genuine national conversation, rather than treating it as an open secret and conflating it with debates on the substantive defense requirements.

ity in Columbus.<sup>267</sup> And across the state, a middle-class standard of living would be put out of reach for several thousand Ohioans if they could not count on the National Guard and Reserves as a way to contribute toward their educational expenses, acquire coveted training, earn a livable wage, provide healthcare, and add to their portfolio of retirement benefits.

Furthermore, many of Ohio's local manufacturers that are suppliers to the prime defense contractors weathered the early 2000s and the China shock far better than many other small businesses. The defense industry is able to export its products abroad to countries that receive generous sums of U.S. aid to buy weapons systems. Meanwhile the industry is protected, on national security grounds, from any foreign import competition.

Thus, it is understandable why politicians on both sides of the aisle fight to preserve what amounts to the United States' only national industrial base—at least those portions of the defense industry residing in their home states and districts—because of the economic benefits their constituents derive from it. Using that logic, one could even argue for expanding the defense budget to encompass more areas of direct relevance to the nation's strength and competitiveness, such as STEM education and pre-commercial research and development. Arguably, defense spending enjoys more bipartisan political backing and potential for growth than any other source of federal funding to support national industries and middle-class livelihoods, education, training, healthcare, and retirement.

Use of the defense budget for domestic economic benefits deserves to be the subject of a genuine national conversation, rather than treating it as an open secret and conflating it with debates on the substantive defense requirements. Furthermore, it needs to be weighed against the alternatives. If some of the money now spent on defense were directed toward helping Dayton, Lima, and other communities build more diversified, stable local economies, then base

closures and changes in military-support activities would likely face less resistance. Many economists argue, for example, that increasing funds for some public works projects to build infrastructure might create more jobs and deliver a greater economic yield in the long term.

To be clear, expenditures on these defense-related activities, in Ohio and elsewhere, serve important national security aims. Both the U.S. Department of Defense and members of Congress prepare and evaluate spending requests based on the substantive requirements to support the missions. But, for all states, the money and personnel involved are so large that it is not possible to ignore the economic implications for local communities. The Defense Department established the Office of Economic Adjustment in the 1960s precisely due to this recognition.

Ultimately, having a genuine national conversation on the trade-offs associated with preserving or increasing the defense budget due to local economic considerations could make it easier to discuss the substantive military requirements more exclusively on their merits.

# Define the U.S. Global Leadership Role and Its Economic Implications

Interviewees repeatedly mentioned the localized labor effects of trade policy, measures to attract FDI, and defense spending as the most relevant aspects of U.S. foreign policy for Ohioans and their economic interests. However, very few interviewees, if any at all, mentioned the importance of sustaining U.S. primacy or global leadership toward the same ends. Only a small minority were in a position to articulate how U.S. global leadership benefits the broad center of American economic life. In a recent poll conducted by *Politico* and AARP, 46 percent of Ohioans supported the United States playing "a major role" in international affairs, but only 25 percent wanted it to play a "leading role." That figure was only slightly higher, at 28 percent, for respondents over fifty years old.<sup>268</sup>

#### **Eroding Domestic Support for U.S. Global Leadership**

It appears that the strategic and economic rationale for U.S. global leadership is no longer obvious or uncontested, if such polls and the interviews conducted for this study are any indication. That suggests a widening gap between those in the foreign policy establishment, who continue to advocate for U.S. global leadership, and American working families who may no longer know what that means or how it benefits them.

Over the past few decades, policymakers have acted on the belief that a world led by the United States delivers far greater economic benefits for the American people than one led by another nation or none at all. The United States retains huge strategic advantages, even today, that set it apart from all other nations. It still boasts the world's largest and most resilient economy, unrivalled military

power, a network of European and Pacific alliances dependent on U.S. security guarantees, a leadership position in postwar international institutions it helped to build, and the U.S. dollar as the global reserve currency.

The United States leveraged these advantages to forge the global economic order in its image, which in some ways has, in essence, given American businesses the equivalent of a home-field advantage. It also relied on the global demand for the dollar—for good or for ill—to spend freely at home and abroad, without having to make hard trade-offs by issuing dollar-denominated debt to foreign partners. <sup>269</sup> Many foreign policy experts are trying to figure out how the United States can sustain and build on these advantages in an increasingly competitive international environment.

Trump, however, is paying far more attention to what it costs the United States to perpetuate this arrangement than to the benefits the nation stands to lose if its leadership role ceases to exist. He contends that, in allowing access to U.S. markets without ensuring the same access to foreign markets, the United States has lost important negotiating leverage with both allies and adversaries. He, therefore, wields the threat of tariffs as a negotiating tactic and has demonstrated a willingness to follow through. On several occasions, he has questioned the value the United States derives from the formidable investments it makes in the security of NATO and Pacific allies. He has indicated that he may be willing to withdraw from the WTO. He has focused obsessively on the United States' bilateral trade deficit (in goods-while ignoring services), not only with China but also with allies and trading partners such as Germany, Japan, Mexico, and South Korea. At times, he has raised concerns about the negative impacts on U.S. exports of a strong dollar, prompting fears that he or his administration is trying to talk down the value of the dollar.<sup>270</sup> Although the Trump administration's strategy documents stress that the America First policy does not represent a U.S. shift toward a zero-sum view of the world, Trump's rhetoric fuels the impression that it does.

Based on the *Politico* and AARP polling and the interviews conducted in Ohio, it appears that many Americans may fall somewhere in between these two contrasting views of U.S. global leadership and foreign engagement. Those interviewed, in particular, seem keen for more effective burden-sharing from other nations and international organizations. Yet they do not appear to be looking at the world in zero-sum terms, where other nations' gains necessarily come at the United States' expense. They do not seem to favor withdrawing from international institutions or dismantling NATO. Rather, they express concern about alienating U.S. partners. They still deeply value U.S. alliances and close ties with like-minded partners who can help address common challenges, including China's mercantilist trading practices. There are also risks that, if alienated, allies could hedge their bets, eventually relying less on U.S. security and weapons systems and reducing U.S. imports in general. This could negatively affect Ohio's exporters and defense industry.

#### Achieving "Economic Peace Through Strength" With China

Any renewed case for U.S. global leadership will need to grapple squarely with what it means for U.S. economic relations with China. Americans are becoming increasingly concerned that China will overtake the United States as the world's largest economy in the decades ahead. China is quickly moving up the value chain, poised to become a formidable competitor in next-generation technologies. Moreover, the country is surging ahead while relying on a model of state capitalism that is incompatible with the international trading system that U.S. leadership helped to build. Those interviewees who suffered directly or indirectly from the China shock in the early 2000s understood the reasoning behind the Trump administration's threat or imposition of tariffs on imported Chinese goods. "At least he's doing something" was the general sentiment among those who believe China's model of state capitalism is fostering unfair trade.<sup>271</sup>

However, many of the economic developers interviewed expressed deep concern that a prolonged trade war with China could create considerable uncertainty and unpredictability in the marketplace. They worried this would have a chilling effect on Ohio's ability to attract investment and therefore maintain a competitive economy. If a trade war led to a precipitous downturn in China's economy, it would not serve Ohio's interests either, given the adverse effects it could have on the global economy. Meanwhile, virtually all interviewed said they wanted more Chinese FDI in Ohio and hoped to boost exports to that country. In fact, as previously noted, Ohio's exports to China have grown steadily in the past several years while its imports of Chinese goods have plateaued.

In sum, there seems to be a common desire to revive the clarity that Reagan's "peace through strength" mantra brought to U.S. intentions toward the Soviet Union by, in effect, seeking to achieve an "economic peace through strength" with China. The challenge is to effectively define "peace" and "strength." For those interviewed, peace may mean adherence to commonly agreed upon rules. Strength, at a minimum, entails the United States rallying its partners in Europe, Asia, and elsewhere to its side, rather than going it alone. But how else should "peace" and "strength" be defined in this context? The answer could help make the strategic and economic case for U.S. global leadership going forward.

#### **Concluding Thoughts**

U.S. foreign policy experts operate based on their assumptions about how the policies they advocate advance the nation's interests. Policymakers in every administration should ideally be explicit about these assumptions and continually test their validity. It is especially important to do this now, in light of Americans' increasingly divergent economic fortunes at home and rising geopolitical and economic competition abroad. This case study aims to contribute to a debate on some of the most prevailing assumptions, in the hopes of aiding policymakers to forge a foreign policy that works better for America's middle class.

# APPENDIX A. LIST OF INTERVIEWS, MAY-SEPTEMBER 2018

The study team met with well over 100 individuals during the course of research between May and September 2018. They included members of Ohio's congressional delegation in Washington, DC, as well as representatives of interested business and trade associations, organized labor, and Washington, DC-based think tanks. The interviews helped inform the concept for the study. However, because this exercise focused on bringing in voices not often heard within the Washington, DC-based foreign policy establishment, the report's content relies on the information obtained from interviews in Cleveland, Columbus, Coshocton, Dayton, Lima, and Marion. This is not the full list of interviews conducted in those locations, as some individuals did not wish to be explicitly named.

#### Cleveland

Jay Foran, senior vice president, TeamNEO

Mindy McLaughlin, director, International Business Development, TeamNEO

Joe Roman, president and chief executive officer, Greater Cleveland Partnership

- Randell McShepard, vice president, Public Affairs, and chief talent officer, RPM International; also founder of PolicyBridge, a local minority-focused think tank
- Marvin Hayes, vice president, Business Development, Data Genomix, and former director, Communications and Public Affairs, Northeast Ohio Areawide Coordinating Agency
- Jason Russell, South Euclid councilman and neighborhood general manager,
  Van Aken District
- Joe Frolik, managing producer, Community Affairs, ideastream, and former *Plain*Dealer editorial writer
- Brent Larkin, former political columnist, Plain Dealer, retired
- Mary Anne Sharkey, owner, Sharkey, Dirck & Associates, former politics editor of the *Plain Dealer*, and former communications director for Ohio Governor Bob Taft

Dominic Coletta, senior vice president, Operations, Tarkett North America

Donald E. Washkewicz, former chairman and chief executive officer, Parker Hannifin, retired

Shilpa Kedar, program director, Economic and Workforce Development, Cleveland Foundation

Luis Carrion, partner, Renner Otto

Amy Hanauer, founding executive director, Policy Matters Ohio Randy Solganik, owner, City Plating

#### Columbus

Alex R. Fischer, president and chief executive officer, Columbus Partnership
Kenny McDonald, president and chief economic officer, Columbus 2020
Steve Schoeny, director, Department of Development, City of Columbus
Jim Samuel, founder, Capitol Integrity Group, and former staff member of two
Republican governors

Tim Burga, president, Ohio AFL-CIO

- Michael B. Coleman, former mayor, City of Columbus, and partner and director, Business and Government Strategies, Ice Miller LLP, Legal Counsel
- Jack Partridge, former president, Columbia Gas of Ohio, and former chairman of the Greater Columbus Chamber of Commerce Board of Directors, retired
- John McEwan, managing partner, Deloitte Columbus, and former chairman of the Greater Columbus Chamber of Commerce Board of Directors
- Jack Irvin, senior director, State and National Affairs, Ohio Farm Bureau Federation
- Beth Hansen, chief of staff, Office of the Governor, State of Ohio (joined by other key staff)

John Minor, president and chief investment officer, Jobs Ohio

Andrew Deye, managing director, JobsOhio

- Ian Sheldon, professor and Andersons chair, Agricultural Marketing, Trade and Policy, The Ohio State University
- Col. Julie Blike (retired), director, Family Readiness and Warrior Support, Ohio National Guard

#### Coshocton

Steve Mercer, mayor, City of Coshocton

Max Crown, safety service director, City of Coshocton, and former superintendent of Rock Tenn/WestRock Paper Mill (closed 2015)

Tom Scott, safety coordinator, City of Coshocton

Marion Sutton, chairman, Jones Metal Products; joined by a few managers and employees

Paul Prater, external affairs manager, AEP Ohio, and Coshocton Port Authority Board member

Tiffany Swigert, executive director, Coshocton Port Authority

Amy Stockdale, executive director, Coshocton County Chamber of Commerce

Sherri Gibson, business coordinator, Coshocton County, Ohio Means Jobs

Brenda Stamper, executive assistant, Coshocton Port Authority

#### **Dayton**

Keith Klein, senior development specialist, Department of Economic Development, City of Dayton

Joe Sciabica, president, Universal Technology Corporation

Kim Frazier, director, Growth Initiatives, The Entrepreneurs Center

Jim Masonbrink, director, Small Business Hub, Wright Brothers Institute, and director of operations, Wright Brothers Institute—2nd St

Torey Hollingsworth, senior policy aide, City of Dayton

Carl Kennebrew, president, IUE-CWA, Dayton

Heather Atkinson, policy program manager, IUE-CWA, Dayton

Mike Wiehe, director, Applied Policy Research Institute, Wright State University

Jane Dockery, associate director, Applied Policy Research Institute, Wright State University

Michael Gessel, vice president, Federal Government Programs, Dayton Development Coalition

#### Lima

David Berger, mayor, City of Lima

Jed Metzger, president and chief executive officer, Lima/Allen County Chamber of Commerce

Jeff Sprague, president and chief executive officer, Allen Economic Development Group

Rich Rudolph, president, Rudolph Foods

#### **Marion**

Dave Claborn, director, Development and Community Relations, The Ohio State University-Marion, and former president, Marion CAN DO! economic development organization

Elizabeth Claborn, elementary school social worker, Marion City Schools

Howard (Howie) Smith, president, Wilson Bohannan Padlock Co.

Lowell Thurston, president, Carroll's Jewelers

Vaughn Sizemore, community development consultant

Ted Graham, president, Marion Industrial Center/Marion Intermodal

Lois Fisher, president, Lois J. Fisher & Associates

Dean Jacob, president and chief executive officer, and Julie Prettyman, vice president and director, Programs, Marion Community Foundation.

Prettyman's family also grows corn and soybeans on 1,200 acres

Jack and Bea Kellogg, former mayor of City of Marion and former executive secretary of Marion Shovel, respectively, retired

Brad Ridge, president, Holbrook & Manter

Ron Cramer, attorney, Michel, Davis & Cramer

# APPENDIX B. THE TRADE-OFFS OF STEEL TARIFFS FOR OHIO'S INDUSTRIES

An analysis drawn from the paper prepared for this case study by Edward (Ned) Hill<sup>272</sup>

Ohio is ground zero for the Trump administration's trade agenda, which aims to revive the vitality of steel, aluminum, and automobile assembly industries and support coal and nuclear electricity generation. Ohioans welcome the attention to their heartland industries and communities. However, they also worry that actions to help some industries will come at the expense of others. It remains to be seen whether, once the dust settles, the actions will ultimately benefit Ohio and its middle class; however, the prospect is not high. While rising steel prices and increased market shares of domestic producers will benefit current workers, managers, and stockholders in the metal-making industries, increased steel costs will decrease profits, sales, earnings, and employment in metal-using industries. There are thirty-six jobs in Ohio's metal-using manufacturing industries for every job in steel and aluminum manufacturing. Also, the metal-using industries have larger supply chains, and the ripple effects from decreased earnings and employment will swamp gains from the spending of steel workers.

That said, the net impact of the current trade conflict on Ohio's industries cannot be assessed in isolation from its impacts on the U.S. and global economy—as those impacts will, in turn, affect Ohio's economy. Nor can the direct economic impacts within Ohio be meaningfully analyzed at this stage. Insufficient data exist on the impact of the June 2018 steel and aluminum tariffs and the subsequent retaliatory measures. Some of the most negative side effects for Ohio's economy appear to have been averted for now, as a result of the side letters accompanying the renegotiation of NAFTA and conclusion (though not yet ratification) of the USMCA. The letters aim to hold Canada and Mexico harmless if global tariffs are implemented for automobile and light truck imports and for automotive parts.

In other words, it is too soon to be declaring the winners and losers in Ohio of the Trump administration's trade measures. But it is possible to gauge the ripple effects already reverberating throughout the state's industries. As one of the nation's top three steel-producing states,<sup>273</sup> Ohio would be expected to benefit from the Trump administration's imposition of a 25 percent tariff on imported steel. Recent investment announcements support that view. Three plants in Ohio are slated to reopen or expand, and a fourth is recruiting a new shift of twenty-five workers.<sup>274</sup> U.S. steelmakers, including Ohio-based TimkenSteel and those with Ohio operations, have reported increased sales and profits and a return to "fair pricing."<sup>275</sup> Note, however, that some investments had been in the works months before the Trump administration took action,<sup>276</sup> and steel prices have been trending upward since March 2016.<sup>277</sup> In reality, tariffs represent only one data point among many in a company' calculations, and long-term market conditions must be right before millions of dollars are invested in new or reinvigorated steel and aluminum production.

The higher prices associated with tariffs may lead to higher profits and employment levels for Ohio's steel producers, but they may also threaten steel-using industries important to the state's economy. Ohio ranks second in the nation in the number of automotive parts suppliers and number of cars produced.<sup>278</sup> Higher steel and aluminum prices should drive up the cost of Ohio-made cars and trucks and provide more reason for moving assembly out of the United States or for depressing sales of new cars. In September, Ford Motor Chief Executive Officer Jim Hackett said that "metal tariffs took about \$1 billion in profit. . . . If it goes on longer, there will be more damage."<sup>279</sup> Such words sound ominous for the 6,150 Ford workers in Ohio.<sup>280</sup> Honda, which employs 15,000 Ohioans, also reported "hundreds of millions of dollars in new costs."<sup>281</sup>

Ohio also is a leader in manufacturing household appliances, and many of those manufacturers are heavy users of steel. Higher prices for these products could potentially make cost-conscious consumers choose cheaper brands made in other countries or delay making purchases. In July, Whirlpool, which employs 9,800 Ohioans, suffered a 14.5 percent one-day drop in share price—its worst in more than thirty years—after steel and aluminum price increases were blamed for lower quarterly earnings.<sup>282</sup> All told, the 11,400 Ohio steel and aluminum production workers are far eclipsed by the 410,000 Ohio workers in industries that use steel and aluminum.<sup>283</sup> That means that those deriving benefits are far outnumbered by those in the metal-using manufacturing industries and in their supply chains who are likely to face negative effects.

In addition, Ohio is home to industries subject to retaliatory tariffs imposed by other countries. Ohio's iron and steel mill products are the most exposed, with \$1 billion in exports being subject to retaliatory tariffs. Corn and soybeans (commodity crops) are in second place and could be the state's largest area of loss due to foreign competition. Soybeans also play a dominant role in Ohio's agricultural exports, with China being the principal customer. Since China has levied a 25 percent duty on the crop, farmers are expecting major losses in the Chinese market share and steep declines in soybean prices.<sup>284</sup> June market prices for soybeans were already 70 cents a bushel below a typical farmer's breakeven

price.<sup>285</sup> Analysis by the U.S. Chamber of Commerce reveals that \$5.7 billion in 2017 shipments from Ohio can be affected by retaliatory tariffs imposed on the United States by Canada, China, the European Union, and Mexico; this is a diverse bundle of products, including agricultural crops, steel and fabricated metals, soaps, prepared foods, and cosmetics.<sup>286</sup>

Finally, mere uncertainty over the imposition of tariffs has a significant price in terms of delayed or lost investment dollars that Ohio businesses crave. As a senior economist in Ohio's state government recently stated, "most companies are taking a 'wait and see' approach before committing dollars, investment, or production. Overall there is way too much on-again, off-again news [for them] to make a definitive decision."<sup>287</sup>

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#### **NOTES**

- 1 Rakesh Kochhar, Pew Research Center, "The American Middle Class Is Stable in Size, but Losing Ground Financially to Upper-Income Families," September 6, 2018, http://www .pewresearch.org/fact-tank/2018/09/06/the-american-middle-class-is-stable-in-size-but-losing-ground-financially-to-upper-income-families/.
- 2 Ibid
- 3 Pew Research Center tabulation of Survey Consumer Finances public-use data. Rakesh Kochhar, Pew Research Center, "Wealth Gap Is at Highest Record Level" in "The American Middle Class," presented to the Carnegie Task Force, Washington, DC, November 17, 2017.
- 4 This historical review of the intersection of U.S. foreign and domestic policy in the post-Second World War and post-Cold War eras draw from, and are informed by, the following sources:

Rawi Abdelal and John G. Ruggie, "Chapter 7: The Principles of Embedded Liberalism: Social Legitimacy and Global Capitalism," in *New Perspectives on Regulation*, ed. David Moss and John Cisternino (Cambridge, MA: The Tobin Project, 2009).

Hal Brands, What Good Is Grand Strategy? Power and Purpose in American Statecraft From Harry S. Truman to George W. Bush (Ithaca: Cornell University Press, 2014).

Hal Brands, American Grand Strategy in the Age of Trump (Brookings Institution Press, 2018).

Hal Brands, Making the Unipolar Moment: U.S. Foreign Policy and the Rise of the Post-Cold War Order (Ithaca: Cornell University Press, 2018).

Jefferson Cowie, *Great Exception: The New Deal and the Limits of American Politics* (Princeton: Princeton University Press, 2016).

Jefferson Cowie, Stayin' Alive: The 1970s and the Last Days of the Working Class (New York: The New Press, 2010).

John Ikenberry, "The Myth of Post-Cold War Chaos," Foreign Affairs 73, no. 3 (May/June 1996): 79-91.

Jonathan Kirshner, American Power After the Financial Crisis (Ithaca, NY: Cornell University Press, 2014).

Dani Rodrik, The Globalization Paradox: Democracy and the Future of the World Economy (New York: W.W. Norton and Company, 2011).

- "National Security Strategy of the United States of America," December 2017, White House: Donald J. Trump, https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf. "Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge," January 2018, Department of Defense: James Mattis, https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf.
- 6 Neal Peirce, The Megastates of America: People, Politics and Power in the Ten Great States (New York: W. W. Norton, 1972), 299.
- William Shkurti and Fran Stewart, Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018, http://glenn.osu.edu/toward-a-new-ohio/.
- 8 William Shkurti and Fran Stewart, "The Decline of Ohio," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018, http://glenn.osu.edu/toward-a-new-ohio/.
- 9 William Shkurti and Fran Stewart, "The Decline of Ohio," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018, http://glenn.osu.edu/toward-a-new-ohio/.

- 10 Ibid.
- 11 Ibid.
- 12 1960 Census of Population, "Advanced Reports: General Population Characteristics," March 28, 1961.
- 13 Shkurti and Stewart, "The Decline of Ohio."
- 14 Lee E. Ohanian, "Competition and Decline of the Rust Belt," Economic Policy Paper 14-6, Federal Reserve Bank of Minneapolis, December 2014, https://www.minneapolisfed.org/-/media/files/pubs/eppapers/14-6/epp\_14-6\_rev.pdf.
- 15 Ibid.
- 16 Ibid.
- 17 For a brief but more detailed account of changes to U.S. international economic policy during this period, see "Nixon and the End of the Bretton Woods System, 1971–1973," Office of the Historian, Department of State, https://history.state.gov/milestones/1969-1976/nixon-shock. For a much fuller discussion, see Peter Peterson, "The United States in a Changing World Economy, Volume 1: A Foreign Economic Perspective," December 27, 1971, https://catalog.hathitrust.org/Record/006243860.
- In his remarks on "Oil and the Economy" delivered on October 21, 2004, then Federal Reserve Bank governor Ben Bernanke explained that "... during the 1970s and early 1980s, both the first-round and second-round effects of oil-price increases on inflation tended to be large, as firms freely passed rising energy costs on to consumers, and workers reacted to the surging cost of living by ratcheting up their wage demands. This situation made monetary policy making extremely difficult, because oil-price increases threatened to raise the overall inflation rate significantly. The Federal Reserve attempted to contain the inflationary effects of the oil-price shocks by engineering sharp increases in interest rates, actions which had the unfortunate side effect of sharply slowing growth and raising unemployment, as in the recessions that began in 1973 and 1981." See https://www.federalreserve.gov/Boarddocs/Speeches/2004/20041021/default.htm.
- 19 Lee E. Ohanian, "Competition and Decline of the Rust Belt," Economic Policy Paper 14-6, Federal Reserve Bank of Minneapolis, December 2014, https://www.minneapolisfed.org/~/media/files/pubs/eppapers/14-6/epp\_14-6\_rev.pdf.
- 20 David G. Taar, "The Steel Crisis in the United States and the European Community: Causes and Adjustments," in *Issues in U.S.-EC Trade Relations*, National Bureau of Economic Research, 1988, http://www.nber.org/chapters/c5960.pdf.
- 21 Douglas A. Irwin, Clashing Over Commerce (Chicago: University of Chicago Press, 2017), 536.
- 22 David G. Taar, "The Steel Crisis in the United States and the European Community: Causes and Adjustments," in *Issues in U.S.-EC Trade Relations*, National Bureau of Economic Research, 1988, http://www.nber.org/chapters/c5960.pdf.
- 23 Ibid.
- 24 Robert Bruno, Steelworkers Alley: How Class Works in Youngstown (Cornell University Press, 1999), 9.
- 25 Bruno, Steelworkers Alley: How Class Works in Youngstown.
- 26 Tim Sablik, "Recession of 1981–82," Federal Reserve History, November 2013, https://www.federalreservehistory.org/essays/recession\_of\_1981\_82.
- 27 "Sun Belt" was coined more than a decade earlier by Kevin Phillips in *The New Republican Majority*; see Anne Trubeck, "Why the Rust Belt Matters," Belt Magazine, April 15, 2016, http://beltmag.com/why-rust-belt-matters/.
- 28 Shkurti and Stewart, "The Decline of Ohio."
- 29 Ibid.
- 30 Recollection of the Carnegie task force members who served in former president William Clinton's administration.
- 31 The Economic Policy Institute (EPI), which maintains strong ties to organized labor, produced estimates of total job loss in each state as a result of NAFTA, putting Ohio's loss at 34,900 manufacturing jobs between 1994 and 2010; see Robert E. Scott, "The High Price of 'Free Trade': NAFTA's Failure Has Cost the United States Jobs Across the Nation," EPI, November 2003, https://www.epi.org/files/page/-/old/briefingpapers/147/epi\_bp147.pdf. However, Public Citizen, an advocacy group affiliated with Ralph Nader, estimated even higher NAFTA-related job losses than the EPI; see Global Trade Watch, NAFTA's 20-Year

Legacy and the Fate of the Trans-Pacific Partnership, Public Citizen, 2014, http://www.citizen .org/documents/NAFTA-at-20.pdf. John McLaren and Shushanik Hakobyan demonstrated that the agreement's overall impact on U.S. labor markets was very small or zero but that there were statistically significant negative impacts in specific industries and geographic locations. Relying on U.S. census data from 1990 and 2000, McLaren and Hakobyan illustrated how workers without a college degree were able to earn higher wages in certain manufacturing industries because they were protected from foreign competition through tariffs. After those tariffs on Mexican-made products, such as footwear, apparel, textiles and plastics, were lifted under NAFTA, however, U.S. firms had to reduce wages or lay off workers. These less-skilled, displaced workers did not have plentiful alternative employment opportunities, so they ended up having to take lower paying jobs, often in the service sector. In towns dominated by such previously protected industries, the glut of less-educated workers ended up depressing wages for all of them, including in the service sector. North Carolina and South Carolina were among the states most vulnerable to this effect, but Ohio suffered from this phenomenon, too, especially in a number of smaller cities and towns. See John McLaren and Shushanik Hakobyan, "Looking for Local Labor Market Effects of NAFTA," Review of Economics and Statistics, October 2016, 98(4): 728-741, http://www.nber.org/ papers/w16535.

- 32 "The Impact of Tariffs on the U.S. Auto Industry," Testimony Before the United States Senate Committee on Finance, Submitted by Josh Nassar, United Auto Workers Legislative Director, September 26, 2018, https://www.finance.senate.gov/imo/media/doc/26SEP2018NassarSMNT.pdf.
- 33 Peterson Institute for International Economics, "NAFTA 20 Years Later: Essays and Presentations at the Peterson Institute for International Economics Assessing the Record Two Decades After Approval of the North American Free Trade Agreement," Briefing No. 14-3, November 2014, https://piie.com/publications/briefings/piieb14-3.pdf.
- 34 Policy Matters Ohio, "Trade Adjustment Assistance: New Opportunities for Ohio Workers," May 18, 2009, https://www.policymattersohio.org/research-policy/fair-economy/workwages/trade-adjustment-assistance-new-opportunities-for-ohio-workers.
- 35 Ibid
- 36 United States Department of Labor, Data on TAA Petitions and Determinations, accessed on April 30, 2018, https://www.doleta.gov/tradeact/taa-data/petitions-determinations-data/.
- 37 Shkurti and Stewart, "The Decline of Ohio." Original data: U.S. Census Bureau, 1953-1989; Statistical Abstract of the United States, various years; Bureau of Labor Statistics, Employment in Non-Agricultural Establishments by Industry by State; Ohio Bureau of Labor Market Information, Current Employment Query, 1990-2016, http://ohiolmi.com/.
- 38 Justin R. Pierce and Peter K. Schott, "The Surprisingly Swift Decline of US Manufacturing Employment," *American Economic Review* 106, no.7 (2016): 1632-1662, http://faculty.som.yale.edu/peterschott/files/research/papers/pierce\_schott\_pntr\_2016.pdf.
- 39 Ibid.
- 40 Daron Acemoglu, David Autor, David Dorn, Gordon H. Hanson, and Brendan Price, "Import Competition and the Great US Employment Sag of the 2000s," *Journal of Labor Economics* 34, no. S1, Part 2 (2016): S141–S198. http://economics.mit.edu/files/9811.
- 41 Robert E. Scott, "Growth in U.S.-China Trade Deficit Between 2001 and 2015 Cost 3.4 Million Jobs," Economic Policy Institute, January 31, 2017, https://www.epi.org/publication/growth-in-u-s-china-trade-deficit-between-2001-and-2015-cost-3-4-million-jobs-heres-how-to-rebalance-trade-and-rebuild-american-manufacturing/.
- 42 Author interview with Professor Ian Sheldon, trade economist, The Ohio State University, July 9, 2018.
- 43 "Ohio's Exports to China," State Report, The U.S.-China Business Council, 2018, https://www.uschina.org/sites/default/files/uscbc\_ohio\_state\_report\_2018.pdf.
- 44 Mary Amiti, Mi Dai, Robert Feenstra, and John Romalis, "How Did China's WTO Entry Benefit U.S. Consumers?" National Bureau of Economic Research, June 2017, http://www.nber.org/papers/w23487.
- 45 Eduardo Porter, "Trump Isn't Wrong on China Currency Manipulation, Just Late," *New York Times*, April 11, 2017, https://www.nytimes.com/2017/04/11/business/economy/trump-china-currency-manipulation-trade.html.

- 46 Michael J. Hicks and Srikant Deveraj, "The Myth and the Reality of Manufacturing in America," June 2015, Ball State University, https://projects.cberdata.org/reports/MfgReality.pdf.
- 47 Susan Houseman at the Upjohn Institute for Employment Research states that overall figures for U.S. manufacturing job losses attributed to automation rely on inflated assumptions about the manufacturing industries' rate of growth in productivity and output. For example, just because a computer chip doubles in speed and performance each year does not mean U.S.-based manufacturers have produced twice as many computers per worker each year. The total number of U.S.-made computers may have actually fallen due to offshoring of production to Asia. See Susan N. Houseman, "Understanding the Decline of U.S. Manufacturing Employment," Upjohn Institute for Employment Research, January 2018, http://www.upjohn.org/mfg-decline.pdf.

Policy analyst Adams Nager and Robert Atkinson, president of the Information Technology and Innovation Foundation, which maintains strong ties to tech industries, also caution against exaggerating technology-related job losses and underappreciating those due to foreign mercantilist trade practices and lack of American competitiveness. See Adams Nager, "Trade vs. Productivity: What Caused U.S. Manufacturing's Decline and How to Revive It," Information Technology and Innovation Foundation, February 2017, http://www2.itif.org/2017-trade-vs-productivity.pdf. See also Adams B. Nager and Robert D. Atkinson, "The Myth of America's Manufacturing Renaissance: The Real State of U.S. Manufacturing," Information Technology and Innovation Foundation, January 2015, http://www2.itif.org/2015-myth-american-manufacturing-renaissance.pdf.

These findings may be less applicable for Ohio, where productivity numbers are much less affected by computer manufacturing. In Ohio, where industries such as steel and autos are more prevalent, productivity increases have been easier to measure and have been substantial. For example, the Bureau of Labor Statistics reports productivity in motor vehicle production increased an average of 3.1 percent a year from 1987 to 2016. For primary metals, including steel, it increased 2.6 percent; see Bureau of Labor Statistics, "Productivity and Related Measures for Selected NAICS Industries 1987 to 2016," in *Proquest Statistical Abstract* 2018 Online, Table 661.

- 48 A human welder today earns around \$25 per hour (including benefits). The Boston Consulting Group (BCG) recently calculated that a robot, performing similar functions, costs the manufacturer approximately \$8 per hour to operate (when factoring installation, maintenance, operations and depreciation). BCG assessed that, in fifteen years, the operating cost per hour for a robot doing similar welding tasks could plunge to as little as \$2 per hour when factoring in improvements in its performance; see Hal Sirkin, Michael Zinser, and Justin Rose, "How Robots Will Redefine Competitiveness," Boston Consulting Group, September 2015, https://www.bcg.com/publications/2015/lean-manufacturing-innovation-robots-redefine-competitiveness.aspx.
- 49 Robotic Industries Association, "Robots, Vision, and Motion Control Industries Set New Growth Records in 2017," February 26, 2018, https://www.robotics.org/content-detail.cfm/Industrial-Robotics-News/Robotics-Vision-and-Motion-Control-Industries-Set-New-Growth-Records-in-2017/content\_id/7019.
- 50 Shkurti and Stewart, "The Decline of Ohio."
- 51 Michael Shields, "Manufacturing a High-Wage Ohio," Century Foundation, March 12, 2018, https://tcf.org/content/report/manufacturing-high-wage-ohio/.
- 52 Shkurti and Stewart, "The Decline of Ohio." Original data based on Ohio Department of Development, Ohio Research Office, Bureau of Economic Analysis data on Per Capital Income (May 2017).
- 53 Edward Alden, Failure to Adjust: How Americans Got Left Behind in the Global Economy (Lanham, Maryland: Rowman and Littlefield, 2016).
- 54 Ibid.
- 55 Ibid.
- 56 Ibid.
- 57 Ibic
- 58 Benjamin Collins, "Trade Adjustment Assistance for Workers and the TAA Reauthorization Act of 2015," Congressional Research Service, August 14, 2018, https://fas.org/sgp/crs/misc/R44153.pdf.

- 59 U.S. Department of Labor, Employment and Training Administration, "Trade Adjustment Assistance: Petition Calculator," accessed November 8, 2018, https://www.doleta.gov/tradeact/taa-data/petitions-determinations-data/petition-calculator.cfm.
- 60 Ronald D'Amico and Peter Z. Schochet, "The Evaluation of the Trade Adjustment Assistance Program: A Synthesis of Major Findings," (paper prepared for the U.S. Department of Labor Employment and Training Administration, December 2012), https://wdr.doleta.gov/research/FullText\_Documents/ETAOP\_2013\_08.pdf.
- 61 Author interviews in Cleveland, Coshocton, Dayton, and Marion, from May-July 2018.
- 62 Ibid.
- 63 Author interviews with AFL-CIO representatives in Washington, DC, on April 25, 2018, and Columbus, Ohio, on June 29, 2018.
- 64 Bill Adams, "The PNC Economic Outlook: Survey of Small and Middle-Market Business Owners," October 2018, pnc.mediaroom.com/download/2018\_Fall\_Ohio.pdf.
- 65 Ohio Department of Job and Family Services, "Unemployment Rate Map: December 2009, Seasonally Adjusted" and "Unemployment Rates, Ohio July 2018, Seasonally Adjusted," 2009 and 2018, http://ohiolmi.com/laus/laus.htm.
- 66 "John R. Kasich: Governor of Ohio," using data from the U.S. Bureau of Labor Statistics, accessed September 12, 2018, http://governor.ohio.gov/.
- 67 Mark Williams, "Ohio's Economy Grew a Bit Faster in 2017 But 1.9% Lagged US Rate," *Columbus Dispatch*, May 4, 2018, http://www.dispatch.com/business/20180504/ohios-economy-grew-bit-faster-in-2017-but-19-lagged-us-rate.
- 68 Ohio Development Services Agency, "Economic Overview," August 2018, https://development.ohio.gov/files/research/E1000.pdf.
- 69 U.S. Energy Information Administration, "Rankings: Total Net Electricity Generation," June 2018, https://www.eia.gov/state/rankings/?sid=OH#/series/51.
- 70 JobsOhio, "2016 Annual Report, 2017 Strategic Plan," 2017, https://www.jobsohio.com/site/assets/files/2335/jobsohio\_2016\_annual\_report.pdf.
- 71 State of Ohio Workforce Innovation and Opportunity Act (WIOA), "Combined State Plan With 2018 Modifications," 2018, http://www.workforce.ohio.gov/Initiatives/Combined-State-Plan
- 72 Interview conducted by S. Ahmed and F. Stewart with state officials and economic developers, Columbus, July 9, 2018.
- 73 Ibid.
- 74 Using data from 2001 to 2014, IMPLAN calculated that Ohio was among the top three most economically diverse states in the nation in terms of the distribution of employment across industries; see IMPLAN, "The Shannon-Weaver Index of Economic Diversity: An Overview and Descriptive Analysis," 2016, https://implanhelp.zendesk.com/hc/en-us/articles/115009505687-The-Shannon-Weaver-Index-of-Economic-Diversity-An-Overview-and-Descriptive-Analysis.
- 75 Ohio Development Services Agency, "Gross Domestic Product From Ohio," September 2018, https://development.ohio.gov/files/research/E1001.pdf.
- 76 Ohio Development Services Agency, "Economic Overview."
- 77 William Shkurti and Fran Stewart, "The Decline of Ohio," Toward a New Ohio paper series, John Glenn College of Public Affairs, http://glenn.osu.edu/toward-a-new-ohio/; Bureau of Labor Statistics, "Ohio Economy at a Glance," July 2018 data seasonally adjusted, https://www.bls.gov/eag/eag.oh.htm, extracted October 5, 2018.
- 78 Input from a Carnegie task force member who served for many years at General Electric.
- 79 Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf.
- 80 Ohio Development Services Agency, "Advanced Manufacturing: Ohio Iron and Steel Industry," December 2017, https://www.development.ohio.gov/files/research/B1001.pdf.
- 81 Ohio Development Services Agency, "Advanced Manufacturing: Ohio Iron and Steel Industry"; Walmart, "Location Facts," August 15, 2018, https://corporate.walmart.com/ourstory/locations/united-states#/united-states/ohio; accessed October 16, 2018.
- 82 Fortune 500, "Biggest Employers," 2017, http://fortune.com/fortune500/list/filtered?sortB y=employees&first500.
- 83 Rachel Gillett, "The Largest Employers in Each US State," *Business Insider*, June 11, 2017, https://www.businessinsider.com/largest-employers-each-us-state-2017-6; Ohio

- Department of Development, "Ohio Major Employers: Historic Data," 2017, https://development.ohio.gov/files/research/B2021.pdf.
- 84 Ohio Department of Development, "Ohio Major Employers, Historic Data."
- 85 Barry T. Hirsch, David A. Macpherson, and Wayne G. Vroman, "State: Union Membership, Coverage, Density, and Employment by State and Sector 2017," Union Membership and Coverage Database from CPS, 2018, http://unionstats.gsu.edu/. For a description of the database, see Barry T. Hirsch and David A. Macpherson, "Union Membership and Coverage Database From the Current Population Survey: Note," *Industrial and Labor Relations Review* 56, no. 2 (January 2003): 349–354.
- 86 William Shkurti and Fran Stewart, "Ohio Resurgent," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018, http://glenn.osu.edu/toward-a-new-ohio/.
- According to Walmart's website, about 75 percent of its store management employees, who once started as hourly associates, earn between \$50,000 and \$170,000 a year. (It also indicates it is investing \$2.7 billion over two years in higher wages, education, and training); see Walmart, "Company Facts," accessed September 10, 2018, https://corporate.walmart.com/newsroom/company-facts. However, the majority of its employees are not store managers. According to Walmart, the average hourly full-time wage was \$13.78 in Ohio as of August 2018; see Walmart, "Location Facts," August 15, 2018, https://corporate.walmart.com/our-story/locations/united-states#/united-states/ohio, accessed October 16, 2018. Annual wage is then calculated using 2,080 hours (as is done by the Bureau of Labor Statistics to get annual wage); see Bureau of Labor Statistics, "May 2017 State Occupational Employment and Wage Estimates: Ohio," accessed September 10, 2018, https://www.bls.gov/oes/current/oes\_oh.htm#00-0000.
- 88 Ohio Development Services Agency, "Advanced Manufacturing: Ohio Iron and Steel Industry"; and Michael Shields, "Manufacturing a High-Wage Ohio," The Century Foundation, March 12, 2018, https://tcf.org/content/report/manufacturing-high-wage-ohio/.
- 89 "Affordability Rankings: Determining the Most Affordable State," U.S. News & World Report, https://www.usnews.com/news/best-states/rankings/opportunity/affordability; Bureau of Economic Analysis, "Per Capita Personal Consumption Expenditure Data," U.S. and Ohio Data 1997–2016, computed in current dollars, https://apps.bea.gov/itable/iTable .cfm?ReqID=70&step=1; Ohio Department of Insurance Communications Office, "Ohioans Pay Among Lowest in Nation for Insurance," January 9, 2018, https://www.insurance.ohio.gov/Newsroom/Pages/01092018PremiumsRanking.aspx.
- 90 Economic Policy Institute, "The Economic Policy Institute's Family Budget Calculator" and related Ohio data, March 2018, https://www.epi.org/resources/budget/.
- Economic Policy Institute, "The Economic Policy Institute's Family Budget Calculator: Technical Documentation," March 5, 2018, https://www.epi.org/publication/family-budget-calculator-documentation/.
- 92 Economic Policy Institute, "The Cost of Child Care in Ohio," April 2016, https://www.epi .org/child-care-costs-in-the-united-states/#/OH; Economic Policy Institute, "The Economic Policy Institute's Family Budget Calculator" and related Ohio data.
- 93 Bureau of Economic Analysis, "Per Capita Personal Consumption Expenditure Data"; Economic Policy Institute, "The Economic Policy Institute's Family Budget Calculator" and related Ohio data.
- 94 Shkurti and Stewart, "Stuck in Neutral," Toward a New Ohio paper series, John Glenn College of Public Affairs, 2018, http://glenn.osu.edu/toward-a-new-ohio/.
- 95 Ohio Development Services Agency, "Ohio IT," May 2018, https://development.ohio.gov/files/research/B1011.pdf; Ohio Development Services Agency, "Bio-Health in Ohio," June 2018, https://development.ohio.gov/files/research/B1014.pdf.
- 96 Ohio Department of Health, "2016 Ohio Drug Overdose Data: General Findings," 2016, https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/health/injury-prevention/2016-Ohio-Drug-Overdose-Report-FINAL.pdf.
- 97 Shkurti and Stewart, "Stuck in Neutral."
- United States Department of Agriculture, "Cash Receipts by Commodity, State Ranking, 2017," all commodities in current dollars, data as of August 30, 2018, https://data.ers.usda.gov/reports.aspx?ID=17844.

- 99 Jon Husted Ohio Secretary of State, "Ohio Agriculture," accessed October 15, 2018, https://www.sos.state.oh.us/profile-ohio/things/ohio-agriculture/.
- 100 Ohio Development Services Agency, "Ohio's Food & Beverage Industry: Output," March 2017, https://www.development.ohio.gov/files/research/B1004.pdf.
- 101 Appalachian Regional Commission, "Ohio," no date, https://www.arc.gov/appalachian\_region/Ohio.asp.
- 102 Appalachian Regional Commission, "County Economic Status in Appalachia, FY 2018," no date, https://www.arc.gov/research/MapsofAppalachia.asp?MAP\_ID=137.
- 103 Ohio Development Services Agency, "Ohio County Profiles: Ohio," no date, https://development.ohio.gov/files/research/C1001.pdf; and Ohio Development Services Agency, "Ohio County Profiles: Appalachia," no date, https://development.ohio.gov/files/research/C1090.pdf.
- 104 Bureau of Labor Statistics data only goes back to 1990, but it shows that the number of Ohioans in mining and logging declined from 17,800 in 1990 to 11,400 today; see Bureau of Labor Market Information, "Current Employment Statistics, Annual Employment by Industry, Ohio Mining and Logging, 1990–2017."
- 105 JobsOhio, "2016 Annual Report, 2017 Strategic Plan."
- 106 Jeff Jenkins, "Odebrecht Withdraws From Wood County Cracker Plant; Subsidiary Takes Lead," MetroNews, June 8, 2016, http://wvmetronews.com/2016/06/08/odebrechtwithdraws-from-wood-county-cracker-plant-subsidiary-takes-lead/; Jared Stonesifer, "Plans for Ohio Cracker Plant Get Bigger, More Expensive," Beaver County Times, March 14, 2018, http://www.timesonline.com/news/20180314/plans-for-ohio-cracker-plant-get-biggermore-expensive.
- 107 Composite drawn from author interviews in Columbus, Coshocton, and Marion, May-July 2018
- 108 Ohio Department of Development, "Charting the Changes: Ohio Demographic Profile," June 2011, https://development.ohio.gov/files/research/P1096.pdf; U.S. Census data, 2017, www.census.gov, accessed October 9, 2018.
- 109 Rich Exner, "Non-minority Population in U.S. and Ohio Shrinks, New Census Estimates Show," *Cleveland.com*, June 21, 2018, https://www.cleveland.com/datacentral/index .ssf/2018/06/share\_of\_non-minorities\_in\_us.html.
- 110 World Population Review, "Ohio Population 2018," September 17, 2018, http://worldpopulationreview.com/states/ohio-population/.
- 111 American Immigration Council, "Immigrants in Ohio Fact Sheet," October 4, 2017, https://www.americanimmigrationcouncil.org/research/immigrants-ohio; and Ohio Development Services Agency, "Ohio County Profiles: Ohio."
- 112 Ibid.
- 113 SelectUSA, "Foreign Direct Investment: USA," using Bureau of Economic Analysis data, https://www.selectusa.gov/servlet/servlet.FileDownload?file=015t0000000LKSn.
- 114 Ohio Development Services Agency, "International Corporate Investment in Ohio Operations," August 2018, https://www.development.ohio.gov/files/research/B2003.pdf.
- 115 Interview conducted by S. Ahmed and F. Stewart, Columbus, July 9, 2018.
- 116 Interviews conducted by S. Ahmed and F. Stewart, Columbus and Marion, May-July 2018.
- 117 Ibid.
- 118 JobsOhio, "Fuyao Glass America Celebrates Grand Opening of Moraine Plant," October 23, 2016, https://www.jobsohio.com/news/posts/fuyao-glass-america-celebrates-grand-opening-of-moraine-plant/; and Ylan Q. Mui, "A Chinese Billionaire Is Staking His Legacy—and Thousands of American Jobs—on This Factory in Ohio," Washington Post, October 26, 2016, https://www.washingtonpost.com/news/wonk/wp/2016/10/26/a-chinese-billionaire-is-staking-his-legacy-and-thousands-of-american-jobs-on-this-factory-in-ohio/?noredirect=on&utm\_term=.ddc3dee8654d.
- 119 Institute of International Education, "Top 25 Institutions Hosting International Students, 2016/17," Open Doors Report on International Educational Exchange, 2017, http://www.iie.org/opendoors.
- 120 Bob Davis, "Trump Plans New Curbs on Chinese Investment, Tech Exports to China," *Wall Street Journal*, June 24, 2018, https://www.wsj.com/articles/trump-plans-new-curbs-on-chinese-investment-tech-exports-to-china-1529883988.

- 121 Ohio Development Services Agency, "Ohio Exports Report: 2017," February 2018, https://development.ohio.gov/files/research/B2004.pdf; and Ohio Development Services Agency, "Ohio Imports Report: 2017," March 2018, https://development.ohio.gov/files/research/B2005.pdf.
- 122 U.S. Department of Commerce, "Ohio Exports, Jobs, & Foreign Investment," International Trade Administration, February 2018, https://www.trade.gov/mas/ian/statereports/states/oh.pdf; Trade Partnership Worldwide, "Trade and American Jobs: The Impact of Trade on U.S. and State-Level Employment, 2018 Update," March 2018, http://tradepartnership.com/reports/trade-and-american-jobs-the-impact-of-trade-on-u-s-and-state-level-employment-update-2018/.
- 123 Business Round Table, "How Ohio's Economy Benefits From International Trade & Investment," 2018, data provided by the Trade Partnership Worldwide.
- 124 Interview conducted by F. Stewart, S. Ahmed, and J. Sullivan, Columbus, June 29, 2018.
- 125 Ibid.
- 126 Phone interview conducted by F. Stewart, August 3, 2018.
- 127 Interview conducted by F. Stewart, S. Ahmed, and J. Sullivan, Columbus, June 29, 2018.
- 128 Bill Canis, "The Motor Vehicle Supply Chain: Effects of the Japanese Earthquake and Tsunami," Congressional Research Service, May 23, 2011, http://web.nchu.edu.tw/~pfsum/SCM/311\_on\_Auto\_Supply\_Chain.pdf.
- 129 Zoe Bambery, Cynthia H. Cassell, Rebecca E. Bunnell, Kakoli Roy, Zara Ahmed, Rebecca L. Payne, and Martin I. Meltzer, "Impact of a Hypothetical Infectious Disease Outbreak on US Exports and Export-Based Jobs," *Health Security* 16, no. 1 (2018), https://www.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0052.
- 130 Centers for Disease Control and Prevention, "Is the U.S. Export Economy at Risk From Global Infectious Outbreaks?," February 13, 2018, https://www.cdc.gov/media/releases/2018/p0213-export-infection-risk.html.
- 131 International Trade Administration, "U.S. Imports of New Passenger Vehicles and Light Trucks, Value and Units," and "U.S. Exports and Imports of Automotive Parts," 1989-2017, https://www.trade.gov/td/otm/autostats.asp.
- 132 General Motors Authority, "General Motors Manufacturing Plants," 2018, http://gmauthority.com/blog/gm/gm-manufacturing/.
- 133 Ford Motor Company, "Operations Worldwide," 2018, https://corporate.ford.com/company/operation-list.html#s1f0.
- 134 Interview conducted by F. Stewart, S. Ahmed, and J. Sullivan, Columbus, June 29, 2018.
- 135 U.S. House of Representatives Committee on Ways and Means, Hearing on Modernization of the North American Free Trade Agreement, testimony by Susan Helper, July 18, 2017.
- 136 U.S. Census Bureau, "Census Bureau Reveals Fastest-Growing Large Cities," May 24, 2018, https://www.census.gov/newsroom/press-releases/2018/estimates-cities.html#table1.
- 137 Interview conducted by F. Stewart and S. Ahmed, Columbus, July 9, 2018.
- 138 Columbus 2020 website, "Columbus-2020 Progress," accessed September 7, 2018, https://columbusregion.com/columbus-2020/progress/.
- 139 Bureau of Labor Statistics, "Columbus, OH Economy at a Glance," July 2018, https://www.bls.gov/eag/eag.oh\_columbus\_msa.htm, data extracted October 17, 2018.
- 140 National Center for Education Statistics, "Ohio State University—Main Campus," College Navigator, accessed September 6, 2018, https://nces.ed.gov/collegenavigator/?q=ohio+state+university&s=all&id=204796#enrolmt.
- 141 The Ohio State University Statistical Summary, https://www.osu.edu/osutoday/stuinfo11 .php and https://www.osu.edu/osutoday/stuinfo.php/historical\_osu\_statistical\_summary\_2011-2017.xls#enroll.
- 142 Interview conducted by F. Stewart, S. Ahmed, and J. Sullivan, Columbus, June 29, 2018.
- 143 Brookings and JPMorgan Chase, "Columbus Global Connect: Global Trade and Investment Plan," The Columbus Region, no date, https://columbusregion.com/doing-business/global-trade-investment/columbus-global-connect/.
- 144 "Tissue Maker Sofidel Breaks Ground in Circleville," *Columbus Dispatch*, July 18, 2016, http://www.dispatch.com/content/stories/business/2016/07/18/1-tissue-maker-building-plant-in-circleville.html.
- 145 Interview conducted by S. Ahmed, Columbus, May 2018.

- 146 U.S. Census Bureau American FactFinder, "ACS Demographic and Housing Estimates: 2012-2016 American Community Survey 5-Year Estimates," Franklin County Ohio 2016 data, accessed September 6, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/ productview.xhtml?pid=ACS\_16\_5YR\_DP05&src=pt.
- 147 Interview conducted by F. Stewart, S. Ahmed, and J. Sullivan, Columbus, June 29, 2018.
- 148 Ibid.
- 149 Hannah Halbert, "Working for Less: Most Common Columbus Jobs Pay Too Little," Metro Area Employment Fact Sheet: Columbus, Policy Matters Ohio, April 30, 2018, https://www.policymattersohio.org/research-policy/fair-economy/work-wages/working-for-less-too-many-jobs-pay-too-little.
- 150 Bureau of Economic Analysis, "Personal Income by County, Metro, and Other Areas," Columbus Metropolitan Area 2016, accessed September 6, 2018, https://www.bea.gov/data/income-saving/personal-income-county-metro-and-other-areas; Bureau of Economic Analysis, "SA1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income," United States 2016, updated September 25, 2018, https://apps.bea.gov/iTable/iTable.cfm?acrdn=6&isuri=1&reqid=70&step=1#reqid=70&step=1&isuri=1, accessed October 16, 2018.
- 151 The Cincinnati metropolitan statistical area (MSA) is actually Ohio's largest metro area at 2.18 million people, but it extends beyond state borders. Columbus and Cleveland are the largest metro areas contained within the state. The Columbus MSA, at 2.08 million people, now edges out Cleveland's 2.06 million people. See the U.S. Census Bureau American FactFinder, accessed September 7, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\_2017\_PEPANNRES&src=pt.
- 152 Campbell Gibson, "Population of the 100 Largest Urban Places: 1950," U.S. Census Bureau, June 15, 1998, https://www.census.gov/population/www/documentation/twps0027/ tab18.txt; and U.S. Census Bureau American FactFinder, Annual Estimates of the Resident Population, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview .xhtml?src=CF.
- 153 U.S. Census Bureau American FactFinder, Annual Estimates of the Resident Population, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF.
- 154 Bill Shkurti and Fran Stewart, "Toward a New Ohio: Questions Every Candidate Should Answer," The Ohio State University, March 2018; Bureau of Economic Analysis, "SA1 Personal Income Summary," United States 2016, data updated September 25, 2018, https://apps.bea.gov/iTable/iTable.cfm?acrdn=6&isuri=1&reqid=70&step=1#reqid=70&step=1&isuri=; Bureau of Economic Analysis, "CA1 Personal Income Summary," Cuyahoga OH 2016, data updated November 16, 2017, https://apps.bea.gov/iTable/iTable.cfm?acrdn=7&isuri=1&reqid=70&step=1#acrdn=7&isuri=1&reqid=70&step=1.
- 155 Interview conducted by F. Stewart, Cleveland, June 26, 2018.
- 156 Bureau of Labor Statistics, Metropolitan Area Employment and Unemployment, accessed June 27, 2018; Columbus 2020 website, "Columbus-2020 Progress," accessed September 7, 2018, https://columbusregion.com/columbus-2020/progress/.
- 157 It is headquarters to the 152-year-old Sherwin-Williams Company, KeyCorp Bank, and Forest City Realty Trust (although in July it was announced that Forest City would be acquired by a Toronto-based real estate investment fund). See Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018; Scott Suttell, "Forest City Realty Trust Agrees to Be Sold to Brookfield Asset Management in an \$11.4 Billion Deal," *Crain's Cleveland Business*, July 31, 2018, http://www.crainscleveland.com/article/20180731/news/170186/forest-city-realty-trust-agrees-be-sold-brookfield-asset-management-114.
- 158 U.S. Bureau of Labor Statistics, "State and Area Employment: Hours and Earnings," Cleveland-Elyria, Ohio, accessed October 17, 2018, https://www.bls.gov/data/; Bureau of Labor Statistics, "Cleveland-Elyria Mentor, OH Economy at a Glance," July 2018, https://www.bls.gov/eag/eag.oh\_cleveland\_msa.htm, data extracted October 12, 2018.
- 159 Interview conducted by F. Stewart, Cleveland, August 2, 2018.
- 160 U.S. Bureau of Labor Statistics, "State and Area Employment: Hours and Earnings"; Bureau of Labor Statistics, "Cleveland-Elyria Mentor, OH Economy at a Glance."
- 161 Ohio Development Services Agency, "Ohio Major Employers—Section 1."
- 162 Bureau of Labor Statistics, "Occupational Employment and Wages: Home Health Aides," May 2017, https://www.bls.gov/oes/current/oes311011.htm.

- 163 Interview conducted by F. Stewart, Cleveland, June 26, 2018.
- 164 Phone interview conducted by F. Stewart, July 25, 2018.
- 165 Interview conducted by F. Stewart, Cleveland, June 18, 2018.
- 166 Interviews conducted by F. Stewart, Cleveland, June 18 and June 26, 2018.
- 167 Interview conducted by F. Stewart, Cleveland, July 4, 2018.
- 168 Phone interview conducted by F. Stewart, July 25, 2018.
- 169 Ohio Development Services Agency, "Ohio Exports Report: 2017," February 2018, https://development.ohio.gov/files/research/B2004.pdf.
- 170 International Trade Association, "Ohio Report 2017," 2017, https://www.trade.gov/mas/ian/statereports/states/oh.pdf; Cleveland MSA share is calculated by F. Stewart: Cleveland's share of \$50.1 billion in exports is 17.6 percent; if its share of employment is similar, nearly 44,000 of the 250,000 jobs attributable to export activities would be in the Cleveland MSA.
- 171 Business Roundtable, "How Ohio's Economy Benefits From International Trade & Investment," 2015, https://tradepartnership.com/wp-content/uploads/2016/02/BRT\_TRADE\_2015\_Ohio.pdf.
- 172 Phone interview conducted by F. Stewart, August 3, 2018.
- 173 Interview conducted by F. Stewart, Cleveland, June 26, 2018.
- 174 Ibid.
- 175 Interview conducted by F. Stewart, Cleveland, August 2, 2018.
- 176 Interview conducted by F. Stewart, Cleveland, June 26, 2018.
- 177 U.S. Census Bureau American FactFinder, Annual Estimates of the Resident Population.
- 178 Ohio Department of Development, "Ohio Research Office, Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf.
- 179 Loren Thompson, "Mega-Base: What Wright-Patterson Air Force Base Means for the Economy of Ohio," Forbes, April 18, 2018, https://www.forbes.com/sites/lorenthompson/2018/04/18/mega-base-what-wright-patterson-air-force-base-means-forthe-economy-of-ohio/#306ef1aa3131.
- 180 Bureau of Labor Statistics, "Metropolitan Area Employment and Unemployment," Dayton Ohio 2000–2009, https://www.bls.gov/data/.
- 181 Jim Kavanagh, "GM Plant's Closing Like Death Knell in Dayton," CNN, December 1, 2008, http://www.cnn.com/2008/US/11/19/ohio.plant.closing/index.html.
- 182 Ben Rooney, "Ohio Reels as NCR Moves to Georgia," CNN Money, June 2, 2009, https://money.cnn.com/2009/06/02/news/companies/ncr\_corporation\_headquarters/.
- 183 JobsOhio, "Fuyao Glass America Celebrates Grand Opening of Moraine Plant," October 23, 2016, https://www.jobsohio.com/news/posts/fuyao-glass-america-celebrates-grand-opening-of-moraine-plant/.
- 184 Phone interview conducted by F. Stewart, September 5, 2018.
- 185 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 186 Barrie Barber, "Wright-Patt Economic Impact on Region Up to \$4.3B a Year," *myDayton Daily News*, January 26, 2016, https://www.mydaytondailynews.com/news/local-military/wright-patt-economic-impact-region-year/IXWq7Uay7MdTq6LsO1RHEK/.
- 187 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 188 Phone interview conducted by F. Stewart, September 5, 2018.
- 189 U.S. Department of Defense, "DOD Approves Community Adjustment Assistance Grant for the Southwest Ohio Region," September 15, 2015, https://www.defense.gov/News/News-Releases/News-Release-View/Article/617286/dod-approves-community-adjustment-assistance-grant-for-the-southwest-ohio-region/.
- 190 U.S. Air Force SBIR/STTR, "Connecting the Air Force to Small Business: FY 2017 Review," 2018, https://www.afsbirsttr.af.mil/Portals/60/Pages/Publications/SBIR\_2017\_Year\_in\_Review-FINAL\_PA-Cleared(88ABW-2018-2356)-WEB.pdf.
- 191 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 192 Lean manufacturing is a technique for reorganizing production to reduce waste, lower costs, and improve quality. The approach has been practiced in the automotive industry for decades and has been increasingly adopted in other manufacturing companies large and small. The IUE-CWA's Lean/high-performance program seeks to change the perspective on Lean manufacturing away from viewing it simply as a management tactic to reduce labor to understanding its necessity as a tool in remaining globally competitive. By training and encouraging union members to become partners in management efforts to reduce waste and costs, the

- IUE-CWA hopes to keep more union jobs in the United States. See IUE-CWA, "LEAN/High Performance Workforce Program," accessed September 7, 2018, https://www.iue-cwa.org/lean.
- 193 IUE-CWA, "LEAN/High Performance Workforce Program," accessed September 7, 2018, https://www.iue-cwa.org/lean.
- 194 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 195 Bureau of Labor Statistics, Metropolitan Area Employment and Unemployment Archived News Releases, https://www.bls.gov/bls/news-release/metro.htm; Local Area Unemployment Statistics, Seasonally Adjusted Metropolitan Area Estimates, https://www.bls.gov/lau/metrossa.htm.
- 196 Jeff Stein, "Federal Reserve Chair: Decline in Worker Share of National Economy 'Very Troubling'," Washington Post, July 17, 2018, https://www.washingtonpost.com/business/2018/07/17/federal-reserve-chair-decline-worker-share-profits-very-troubling/?utm\_term=.45fe23d0715d; and David Autor, David Dorn, Lawrence F. Katz, Christina Patterson, and John Van Reenen, "The Fall of the Labor Share and the Rise of Superstar Firms," U.S. Census Bureau, May 1, 2017, https://www.ddorn.net/papers/ADKPV-SuperstarFirms.pdf.
- 197 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 198 Senator Joe Donnelly (D-IN), "Donnelly, Brown, Gillibrand Introduce 'End Outsourcing Act' to Promote American Workers," January 30, 2017, https://www.donnelly.senate.gov/newsroom/press/donnelly-brown-gillibrand-introduce-end-outsourcing-act-to-protect-american-workers.
- 199 Arthur Sullivan, "Representing Workers, the German Way," DW, December 12, 2017, https://www.dw.com/en/representing-workers-the-german-way/a-41751752; Senator Tammy Baldwin (D-WI), "U.S. Senator Tammy Baldwin Introduces Legislation to Rein in Stock Buybacks and Give Workers a Seat at the Table," March 22, 2018, https://www.baldwin.senate.gov/press-releases/reward-work-act; Senator Elizabeth Warren (D-MA), "Companies Shouldn't Be Accountable Only to Shareholders," Wall Street Journal, August 14, 2018, https://www.wsj.com/articles/companies-shouldnt-be-accountable-only-to-shareholders-1534287687.
- 200 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 201 Interview conducted by F. Stewart, Dayton, July 10, 2018.
- 202 Fred Steiner, "Lima's Fight for Its Refinery Detailed by Bluffton University Professor Perry Bush," *Bluffton Icon*, July 17, 2012, http://www.blufftonicon.com/news/2012/07/17/limas-fight-its-refinery-detailed-bluffton-university-professor-perry-bush.
- 203 Doug Wissing, "The Unstoppable Abrams," *American Legion Magazine*, August 2013, http://www.cityoflimaohio.us/DocumentCenter/View/973.
- 204 Jenny Leonard, "Marine Reserve Unit Hit Hard in Iraq Holds 10-year Reunion," Marine Corps Times, August 19, 2015, https://www.marinecorpstimes.com/news/your-marinecorps/2015/08/19/marine-reserve-unit-hit-hard-in-iraq-holds-10-year-reunion/.
- 205 Defense Spending by State, Fiscal Year 2013, U.S. Department of Defense and Office of Economic Adjustment.
- 206 Defense Security Cooperation Agency, "Kingdom of Morocco—M1A1 SA Abrams Tank Enhancement, Support and Equipment," June 18, 2012, http://www.dsca.mil/major-arms-sales/kingdom-morocco-m1a1-sa-abrams-tank-enhancement-support-and-equipment; Senator Robert Portman (R-Ohio), "Portman: Lima Will Benefit From New Military Sales to Saudi Arabia," August 10, 2016, https://www.portman.senate.gov/public/index .cfm?p=press-releases&id=96C9E74E-0F06-404E-8AB5-A54A6ECD884E.
- 207 House Appropriations Committee, Chairman Rodney Frelinghuysen, "Fiscal Year 2018 Defense Bill," March 21, 2018, https://appropriations.house.gov/uploadedfiles/03.21.18\_fy18\_omnibus\_-\_defense\_-\_summary.pdf.
- 208 Population and Population Growth: U.S. Census Bureau, "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017," Lima Ohio Metro Area 2017, accessed October 17, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview .xhtml?pid=PEP\_2017\_PEPANNRES&src=pt.
- 209 Interview conducted by F. Stewart, Lima, July 11, 2018.
- 210 Ibid.

- 211 Emily Campbell, "The Path From Poverty to Prosperity Can Be a Roller Coaster: An Examination of Hourly Wages, Expenses, and Monthly," Center for Community Solutions, July 2016, https://www.communitysolutions.com/research/path-poverty-prosperity-can-roller-coaster-examination-hourly-wages-expenses-monthly/.
- 212 Josh Ellerbrock, "Pilot Program Rolled Out to End 'Benefit Cliff," Lima News, May 4, 2018, https://www.limaohio.com/news/298720/pilot-program-rolled-out-to-end-benefit-cliff.
- 213 Interview conducted by F. Stewart, Lima, July 11, 2018.
- 214 Ibid.
- 215 Ibid.
- 216 Veronica Nigh, "The Squeal Is Real—U.S. Pork Exports to China Plummet," Market Intel, May 29, 2018, https://www.fb.org/market-intel/the-squeal-is-real.
- 217 Sara Brown, "U.S. Pork Surprised by Mexican Tariffs, Cautiously Optimistic on China," AG Web, June 5, 2018, https://www.agweb.com/article/us-pork-surprised-by-mexican-tariffs-cautiously-optimistic-on-china/.
- 218 Veronica Nigh, "The Squeal Is Real—U.S. Pork Exports to China Plummet"; and U.S. Department of Agriculture, "Livestock and Poultry: World Markets and Trade," April 10, 2018, https://apps.fas.usda.gov/psdonline/circulars/livestock\_poultry.pdf.
- 219 Phone interview conducted by F. Stewart, July 19, 2018.
- 220 Interview conducted by F. Stewart, Lima, July 11, 2018.
- 221 Interview conducted by F. Stewart, Lima, July 11, 2018; and Camri Nelson, "Husky Refinery Buys Global Energy Land," *Lima News*, March 2, 2018, https://www.limaohio.com/news/288270/husky-refinery-buys-global-energy-land.
- 222 Phone interview conducted by F. Stewart, July 19, 2018.
- 223 Gergely Szakacs, "Enter the Robots: Automation Fills Gaps in East Europe's Factories," Reuters, February 7, 2018, https://www.reuters.com/article/us-easteurope-automation-insight/enter-the-robots-automation-fills-gaps-in-east-europes-factories-idUSKBN1FR1ZK; and phone interview conducted by F. Stewart, July 19, 2018.
- 224 U.S. Census Bureau, QuickFacts: Marion County, Ohio, https://www.census.gov/quickfacts/fact/table/marioncountyohio/PST045217; Marion Area Chamber of Commerce, Marion County Community Profile, https://www.marionareachamber.org/communityprofile/; and Ohio History Central, "Marion Steam Shovel Company," accessed September 8, 2018, http://www.ohiohistorycentral.org/w/Marion\_Steam\_Shovel\_Company.
- 225 Ohio History Central, "Marion Steam Shovel Company," accessed September 8, 2018, http://www.ohiohistorycentral.org/w/Marion\_Steam\_Shovel\_Company.
- 226 Marion Acquisition: Bucyrus Acquired the Marion Power Shovel Company in 1997, accessed September 8, 2018, https://www.webcitation.org/5w43ELeZQ?url=http://bucyrus.com/company/history/marion-acquisition.aspx; and interview conducted by F. Stewart and S. Ahmed, Marion, June 20, 2018.
- 227 Marion Area Chamber of Commerce, Marion County Community Profile, https://www.marionareachamber.org/communityprofile/; and Dan Gearino, "Marion Whirlpool Plant Keeps Churning Out Dryers: Generations Have Cycled Through Factory Doors," Blade, September 18, 2016, https://www.toledoblade.com/business/2016/09/18/Marion-Whirlpool-plant-keeps-churning-out-dryers/stories/20160917193?abnpageversion=evoke.
- 228 Marion Area Chamber of Commerce, Marion County Community Profile, https://www.marionareachamber.org/communityprofile/; and World Steel Association, "Top Steel-Producing Companies 2017," accessed September 8, 2018, https://www.worldsteel.org/steel-by-topic/statistics/top-producers.html.
- 229 Interview conducted by F. Stewart and S. Ahmed, Marion, June 20, 2018.
- 230 Interview conducted by F. Stewart and S. Ahmed, Marion, June 21, 2018.
- 231 Interview conducted by F. Stewart and S. Ahmed, Marion, June 20, 2018.
- 232 Ibid.
- 233 Drew Bracken, "Blueprint: Everyone Has a Role in Marion's Revitalization," *Marion Star*, March 25, 2018, https://www.marionstar.com/story/news/local/2018/03/25/blueprint-everyone-has-role-marions-revitalization/415955002/.
- 234 Interview conducted by F. Stewart and S. Ahmed, Marion, June 20, 2018.
- 235 Ibid.
- 236 Ibid.

- 237 Ohio Department of Development, Ohio Research Office, Bureau of Economic Analysis Per Capita Income (May 2018); Bureau of Economic Analysis, "SA1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income," United States 2016, updated September 25, 2018, https://apps.bea.gov/iTable/iTable.cfm?acrdn=6&isuri=1&reqid=70&step=1#reqid=70&step=1&isuri=1, accessed October 16, 2018; U.S. Census Bureau, QuickFacts: Marion City, Ohio, income data 2012-2016, https://www.census.gov/quickfacts/marioncityohio.
- 238 U.S. Census Bureau, QuickFacts: Marion County, Ohio, https://www.census.gov/quickfacts/fact/table/marioncountyohio/PST045217.
- 239 Population and Population Growth: U.S. Census Bureau, "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017," accessed October 12, 2018, https://factfinder .census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF
- 240 Paul Wilson, "Coshocton Factory to Close, 200 Losing Jobs," *Columbus Dispatch*, August 28, 2007, http://www.dispatch.com/content/stories/business/2007/08/28/prettyprod .ART\_ART\_08-28-07\_C10\_QB7NTE3.html.
- 241 Mike McNulty, "Ansell to Close Ohio Glove Production Site," *Rubber & Plastic News*, November 14, 2012, http://www.rubbernews.com/article/20110905/ISSUE/309059999/ansell-to-close-ohio-glove-production-site.
- 242 "WestRock Company Formed With Completion of Merger of MeadWestvaco and RockTenn," Globe Newswire, July 1, 2015, https://globenewswire.com/newsrelease/2015/07/01/749119/10140347/en/WestRock-Company-Formed-with-Completion-of-Merger-of-MeadWestvaco-and-RockTenn.html.
- 243 "WestRock Paper Mill Shuts Down," *Coshocton Tribune*, December 16, 2015, https://www.coshoctontribune.com/story/news/local/2015/12/16/westrock-paper-mill-shuts-down/77410280/; Alex Knisely, "150-Year-Old Business to Close," *Times Reporter*, October 25, 2015, http://www.timesreporter.com/article/20151025/business/151029560; and interviews conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018.
- 244 Phone interview conducted by F. Stewart, September 6, 2018.
- 245 Interviews conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018; and Kyle Rowland, "Closed Plants Shake Central Ohio City," Blade, July 18, 2016, http://www.toledoblade.com/Politics/2016/07/18/Closed-plants-shake-central-Ohio-city-Coshocton.html.
- 246 Interview conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018.
- 247 Ibid
- 248 Jennifer L. Manfrin, "Jones Metal: 'It's About Helping Others," Coshocton Tribune, August 21, 2016, https://www.coshoctontribune.com/story/news/local/2016/08/21/jones-metal-helping-others/88991668/.
- 249 Bureau of Labor Statistics, "QCEW State and County Map: Ohio," 2017, https://beta.bls.gov/maps/cew/OH?period=2017-Q4&industry=10&pos\_color=blue&neg\_color=orange&Update=Update&chartData=2&ownerType=0&distribution=EqualSteps#tab1.
- 250 Ohio Department of Development, Ohio Research Office, Bureau of Economic Analysis Per Capita Income (May 2018); Bureau of Economic Analysis, "SA1 Personal Income Summary: Personal Income, Population, Per Capita Personal Income," United States 2016, updated September 25, 2018, https://apps.bea.gov/iTable/iTable.cfm?acrdn=6&isuri=1&reqid=70&step=1#reqid=70&step=1&isuri=1, accessed October 16, 2018.
- 251 U.S. Census Bureau FactFinder, Annual Estimates of the Resident Population.
- 252 Interview conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018.
- 253 Ibid.
- 254 Mark Barteau and Sridhar Kota, "Shale Gas: A Game Changer for U.S. Manufacturing," University of Michigan, July 2014, https://energy.umich.edu/research/publications/publication/shale-gas-a-game-changer-for-american-manufacturing/.
- 255 Interview conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018.
- 256 Ihid
- 257 Kaleigh Rogers, "Rural America Is Building Its Own Internet Because No One Else Will," Motherboard, August 29, 2017, https://motherboard.vice.com/en\_us/article/paax9n/rural-america-is-building-its-own-internet-because-no-one-else-will.
- 258 Phone interview conducted by F. Stewart, September 6, 2018.
- 259 Interview conducted by F. Stewart and S. Ahmed, Coshocton, June 28, 2018.

260 Population and Population Growth: U.S. Census Bureau, "Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017," accessed September 12, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\_2017\_PEPANNRES&src=pt; growth figures calculated using 2010 and 2017 population estimates. Foreign-born Population: U.S. Census Bureau, "Percent of People Who Are Foreign Born: 2012–2016 American Community Survey 5-Year Estimates," accessed September 12, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview .xhtml?pid=ACS\_16\_5YR\_GCT0501.US22PR&prodType=table.

Per Capita Income: U.S. Bureau of Economic Analysis, "Personal Income by County, Metro, and Other Areas," "Personal Income by State," accessed September 12, 2018, https://www.bea.gov/data/income-saving.

Median Home Value: U.S. Census Bureau, "Median Housing Value of Owner-Occupied Housing Units: 2012-2016 American Community Survey 5-Year Estimates," metropolitan and micropolitan statistical areas and state data, accessed September 12, 2018, https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\_16\_5YR\_GCT2510.US22PR&prodType=table.

Major Nonfarm Employers (Columbus): The City of Columbus, "Major Employers in Columbus," accessed September 18, 2018, https://www.columbus.gov/development/economic-development/Major-Employers/.

Major Nonfarm Employers (Cleveland): Cuyahoga County has the largest employers of the counties making up the Cleveland metropolitan statistical area; see County of Cuyahoga, Ohio, "Annual Informational Statement in Connection With Obligations of the County," September 26, 2016, https://fiscalofficer.cuyahogacounty.us/pdf\_fiscalofficer/en-US/obm/2016-AIS.pdf.

Major Nonfarm Employers (Dayton): Dayton.com, "Top Employers in the Dayton Area," February 27, 2015, https://www.dayton.com/business/employment/top-employers-the-dayton-area/58X4L6ox8z15TNliRpgWZI/.

Major Nonfarm Employers (Lima): Lima News, "Largest Employers in Lima Area," March 6, 2016, https://www.limaohio.com/news/169773/largest-employers-in-lima-area.

Major Nonfarm Employers (Marion): Marion Area Chamber of Commerce, "Marion County Community Profile," accessed September 18, 2018, https://www.marionareachamber.org/communityprofile/; The Columbus Region, "Marion County Largest Private Sector Employers," accessed September 18, 2018, https://columbusregion.com/charts/delaware-county-largest-private-sector-employers-copy-2-copy/.

Major Nonfarm Employers (Coshocton): Coshocton County Chamber of Commerce, "Coshocton County Profile," accessed September 18, 2018, http://www.coshoctonchamber.com/index.php/business-info/coshocton-county-profile.

Major Nonfarm Employers (Ohio): Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf.

Manufacturing Employment (Columbus): Bureau of Labor Statistics, "Columbus, OH Economy at a Glance," July 2018 data not seasonally adjusted, https://www.bls.gov/eag/eag.oh\_columbus\_msa.htm, data extracted October 12, 2018.

Manufacturing Employment (Cleveland): Bureau of Labor Statistics, "Cleveland-Elyria Mentor, OH Economy at a Glance," July 2018 data not seasonally adjusted, https://www.bls.gov/eag/eag.oh\_cleveland\_msa.htm, data extracted October 12, 2018.

Manufacturing Employment (Dayton): Bureau of Labor Statistics, "Dayton, OH Economy at a Glance," July 2018 data not seasonally adjusted, https://www.bls.gov/eag/eag.oh\_dayton\_msa.htm, data extracted October 12, 2018.

Manufacturing Employment (Lima): Bureau of Labor Statistics, "Lima, OH Economy at a Glance," July 2018 data not seasonally adjusted, https://www.bls.gov/eag/eag.oh\_lima\_msa.htm, data extracted October 12, 2018.

Manufacturing Employment (Marion and Coshocton): Bureau of Labor Statistics, "Databases, Tables, & Calculators by Subject," Marion and Coshocton Counties, Ohio, Total Employees in All Industries and Manufacturing Employees, Preliminary March 2018 data, https://data.bls.gov/PDQWeb/en, data extracted October 16, 2018.

- Manufacturing Employment (Ohio): Bureau of Labor Statistics, "Databases, Tables, & Calculators by Subject," Ohio Statewide Total Nonfarm Employees and Manufacturing Employees not seasonally adjusted," July 2018 data https://www.bls.gov/data/, data extracted October 16, 2018.
- 261 Ohio Development Services Agency, "Economic Overview," May 2018, https://development.ohio.gov/files/research/E1000.pdf.
- 262 Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf; Rachel Gillett, "The Largest Employers in Each U.S. State," Business Insider, June 11, 2017, https://www.businessinsider.com/largest-employers-each-us-state-2017-6; Ohio Development Services Agency, "Advanced Manufacturing: Ohio Iron and Steel Industry," December 2017, https://www.development.ohio.gov/files/research/B1001.pdf.
- 263 The study interviews took place before a new trade agreement was reached with Mexico and Canada. Therefore, much of their opinions reflect what they hoped or feared would happen with the renegotiation of NAFTA. The new labor standard provisions in the updated United States-Mexico-Canada trade deal (USMCA) require Mexico to extend protections for workers and allow sanctions to be imposed for any labor violations that impact trade.
- 264 SelectUSA, "Foreign Direct Investment in the United States," accessed October 2, 2018, https://www.selectusa.gov/FDI-in-the-US.
- 265 Congressional Budget Office, "Defense and National Security," accessed October 2, 2018, https://www.cbo.gov/topics/defense-and-national-security.
- 266 Defense Logistics Agency, "DLA Land and Maritime: DSCC," accessed October 2, 2018, http://www.dla.mil/LandandMaritime/Locations/Columbus/.
- 267 Defense Finance and Accounting Service, "DFAS Cleveland," accessed October 2, 2018, https://www.dfas.mil/careers/PDFs/ClevelandSiteSheet.html.
- 268 Steven Shepard and Tyler Fisher, "Trump Loses Altitude in Ohio Ahead of Midterms," *Politico*, September 18, 2018, https://www.politico.com/magazine/story/2018/09/17/ohio-poll-senate-governor-brown-renacci-dewine-cordray-2018-219915.
- 269 Michael Mastanduno, "System Maker and Privilege Taker: U.S. Power and the International Political Economy," *World Politics* 61, no. 1 (January 2009): 121-154.
- 270 Ian Talley, "Trump Comments Signal Shift in Approach to U.S. Dollar," *Wall Street Journal*, January 17, 2017, https://www.wsj.com/articles/trump-comments-signal-shift-in-approach-to-u-s-dollar-1484690469.
- 271 As of the end of October, the United States had imposed tariffs on \$250 billion worth of Chinese goods and services in 2018. Beijing retaliated to the initial \$50 billion in tariffs but had yet to retaliate to the \$200 billion.
- 272 This appendix is drawn from a longer paper prepared by Professor Edward (Ned) Hill for this project and will be published separately by the John Glenn College of Public Affairs at The Ohio State University, accessible at http://glenn.osu.edu/trade-war-impact.
- 273 Ohio Steel Council, "A Revitalized Steel Industry," http://www.ohiosteel.org/ohio-steel-industry/a-revitalized-steel-industry/; and Rex Nutting and Andrea Riquier, "Here Are the States Most Impacted by Steel Tariffs," Market Watch, March 9, 2018, https://www.marketwatch.com/story/here-are-the-states-most-threatened-by-steel-tariffs-2018-03-06.
- 274 Katie Nix, "Republic Steel to Restart Furnace by September," Chronicle-Telegram, June 26, 2018, http://www.chroniclet.com/Local-News/2018/06/26/Republic-Steel-to-restart-furnace-by-September.html; Paul Giannamore, "JSW Steel To Get Tax Credit for Mingo Junction Steel Plant," Intelligencer, September 27, 2018, http://www.theintelligencer.net/news/community/2018/09/jsw-steel-to-get-tax-credit-for-mingo-junction-steel-plant/; and "JSW Steel to Invest \$500M in Acero Junction," Business Journal, June 22, 2018, https://businessjournaldaily.com/jsw-steel-invest-500m-acero-junction/; and Jon Chavez, "Delta's North Star Steel Plant May Get \$700M Upgrade," Toledo Blade, August 13, 2018, https://www.toledoblade.com/business/2018/08/13/Delta-North-Star-steel-plant-may-get-700M-upgrade/stories/20180813112?abnpageversion=evoke.
- 275 "Steel Profits Soar, Showing Power of Tariffs," Argus Media, August 20, 2018, https://www.argusmedia.com/en/news/1739112-steel-profits-soar-showing-power-of-tariffs?page=1; "TimkenSteel CEO Says Tariffs Are Helping U.S. Companies, But Canton Company's Stock

- Dives After Earnings Report," Akron Beacon Journal, July 27, 2018, https://www.ohio.com/akron/business/timkensteel-ceo-says-tariffs-are-helping-u-s-companies-but-canton-companys-stock-dives-after-earnings-report; and "Timken Reports Strong Second-Quarter 2018 Results; Raises Full-Year Outlook," Timken News Archives, http://news.timken.com/2018-07-31-Timken-Reports-Strong-Second-Quarter-2018-Results-Raises-Full-Year-Outlook.
- 276 Mark Law, "Mingo Junction Steel Mill Purchase Almost Complete," Intelligencer, June 18, 2018, http://www.theintelligencer.net/news/top-headlines/2018/06/mingo-junction-steel-mill-purchase-almost-complete/; JSW Steel to Get Tax Credit for Mingo Junction Steel Plant," The Intelligencer. September 27, 2018, http://www.theintelligencer.net/news/community/2018/09/jsw-steel-to-get-tax-credit-for-mingo-junction-steel-plant/; "JSW Steel to Invest \$500M in Acero Junction"; Chavez, "Delta's North Star Steel Plant May Get \$700M Upgrade"; and Republic Steel, "Republic Steel Has Invested \$12 Million in Its Plants Over the Last 18 Months Preparing for Increased Market Demand," PR Newswire, June 22, 2018, https://www.prnewswire.com/news-releases/republic-steel-has-invested-12-million-in-its-plants-over-the-last-18-months-preparing-for-increased-market-demand-300669508.html.
- 277 Producer Price Index for the steel industry, U.S. Bureau of Labor Statistics, https://fred.stlouisfed.org/series/PCU3311103311107.
- 278 "The Automotive Industry," TeamNEO, January 26, 2016, https://www.clevelandplus.com/teamneo/wp-content/uploads/sites/2/2017/01/Automotive-Industry.pdf.
- 279 Keith Naughton, "Ford CEO Says Trump Metals Tariffs Took \$1 Billion of Profit," *Bloomberg*, September 26, 2018, https://www.bloomberg.com/news/articles/2018-09-26/ford-ceo-says-trump-s-metals-tariffs-took-1-billion-in-profits.
- 280 Ohio Development Services Agency, "Ohio Major Employers—Section 1," May 2018, https://development.ohio.gov/files/research/B2001.pdf.
- 281 Ohio Development Services Agency, "Ohio Major Employers—Section 1"; Jessica Wehrman, "Honda, Auto Industry Caution About Impact of Tariffs," Columbus Dispatch, September 27, 2018, https://www.dispatch.com/news/20180927/honda-auto-industry-caution-about-impact-of-tariffs.
- 282 Ohio Development Services Agency, "Ohio Major Employers—Section 1"; Michael Sheetz, "Whirlpool Shares Plunge 14.5%, Post Worst Day Since 1987 as Tariffs Wreak Havoc With Costs and Suppliers," CNBC, July 24, 2018, https://www.cnbc.com/2018/07/24/whirlpoolstock-plunges-as-tariffs-hit-suppliers-steel-costs.html.
- 283 Nutting and Riquier, "Here Are the States Most Impacted by Steel Tariffs."
- 284 Paul Davidson, "Chinese Appetite for American Soybeans Could Spur Compromise on Tariffs," USA Today, August 30, 2018, https://www.usatoday.com/story/money/2018/08/30/us-china-trade-war-china-need-soybeans-could-spur-deal/1136570002/; and Ohio Soybean Association, "Ohio Soybean Farmers Will Experience Long-Term Consequences if Trade Dispute Continues," September 26, 2018, http://www.soyohio.org/association/ohio-soybean-farmers-will-experience-long-term-consequences-trade-dispute-continues/.
- 285 Kaitlin Schroeder, "China Tariffs Sink Prices for Ohio Soybean Farmers," *Dayton Daily News*, July 6, 2018, https://www.daytondailynews.com/news/china-tariffs-sink-prices-for-ohio-soybean-farmers/JwqTDBeHtVm8Lh9WRaM2IO/.
- 286 U.S. Chamber of Commerce, "Trade Works for Ohio. Tariffs Don't.," https://www.uschamber.com/tariffs.
- 287 E-mail communication with E. Hill, received on September 5, 2018.

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